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THE CHEMICAL MARKET AUTHORITY

June 8, 1959

DDT Special Report Page 3

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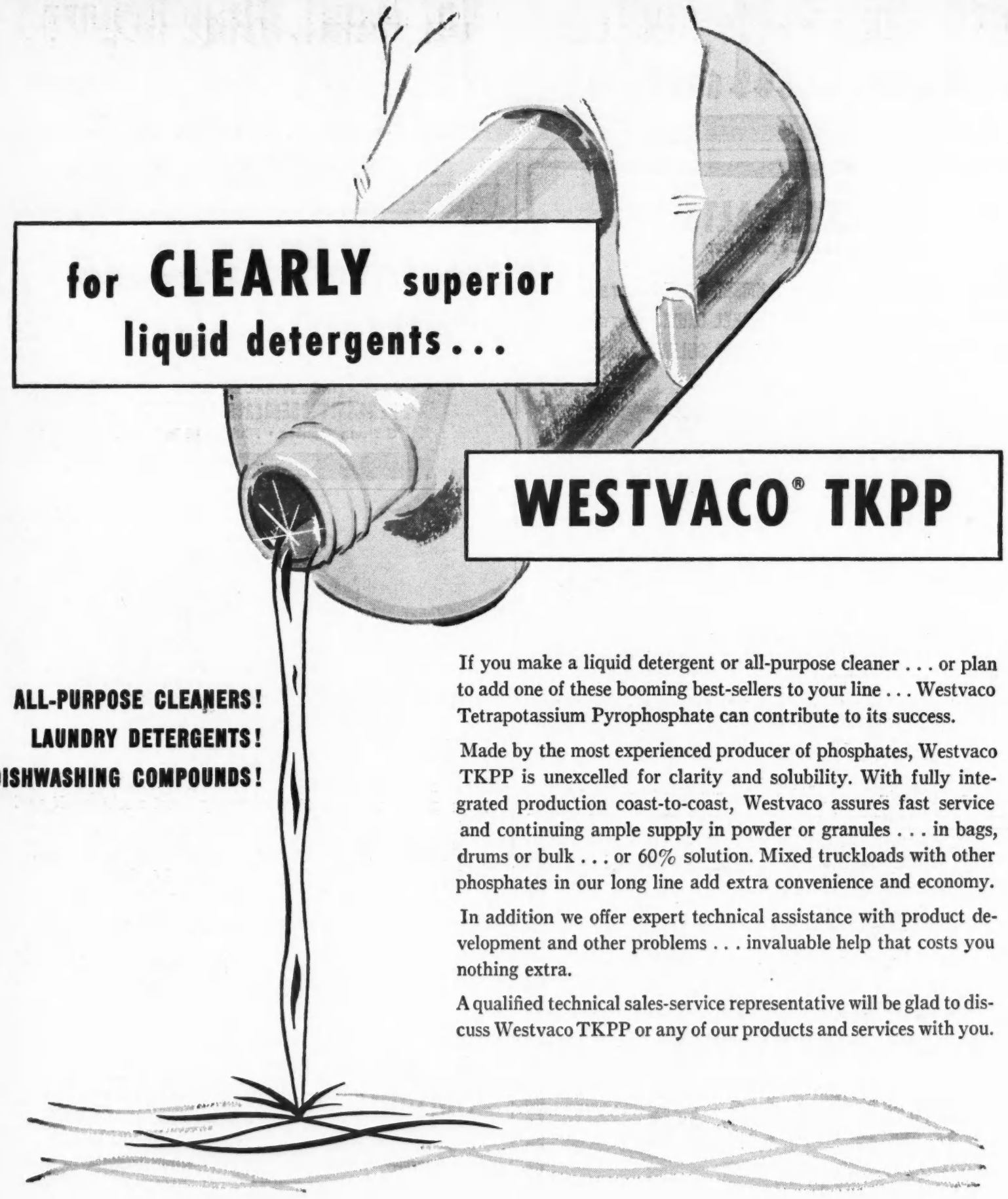

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Vol. 175 No. 24 30 Church St., New York 7, N.Y. June 8, 1959

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DDT'S COST-PRICE SQUEEZE

Raw Materials vs. the Finished Product

	DDT	Chlorine	Benzene	Ethanol
1959	22¢	3.15¢	31¢	52¢
1958	22¢	3.15¢	31¢	52¢
1957	23¢	3.15¢	36¢	47¢
1956	27¢	3.15¢	36¢	47¢
1955	27¢	3.05¢	36¢	40¢
1954	27¢	2.93¢	36¢	43¢
1953	27¢	2.93¢	40¢	48¢
1952	48¢	2.7¢	30¢	55¢

DDT prices are per pound for carlots of technical material, flake or lump, bags, delivered. Chlorine prices are per pound for liquid in tanks, single units, works, freight equalized. Benzene prices are per gallon for tankcars of coaltar material, pure or nitration grade, works, Pittsburgh district. Ethanol prices are per gallon for tankcars of 190-proof USP material, tax-free, delivered East of the Rockies.

DDT Developments in Mexico Have US Marketers Wondering If Trouble Is Looming Ahead

OPD Special Report

Things look fine in the DDT market at present, after more than a decade of capricious pricing policies and burdensome overcapacity. But beneath the surface, another melee of moderate proportions may be developing. This time, it's the rush to Mexico. Our southern neighbor took nearly 21 million pounds of US technical DDT last year—nearly 30 percent of our total exports. But Montrose Mexicana S.A., co-owned by Stauffer Chemical Company and Montrose Chemical Company of California, is running a plant at Salamanca, Mexico, capable of putting out 15 million pounds of technical DDT a year.

To thicken the plot further, Diamond Black Leaf de Mexico, a subsidiary of Diamond Alkali Company, has been quietly building an 8-million-pound-a-year plant in Mexico City. The unit is expected on stream in July, and will bring total Mexican capacity to 23 million pounds a year.

Mexico's Actual Needs

To add further fat to the fire, Mexico's annual needs are estimated at only 14 million pounds a year of technical DDT at the outside. Why, then, was almost 21 million pounds shipped there in '58?

• The Mexican government, since that country is now basic in DDT, has stopped imports of technical material. US exporters to that country shipped in as much as they could lay their hands on before the boom was lowered.

• Speculation that the price of DDT in Mexico would rise to 27 cents with the imposition of restrictions on imports (compared with a 22-cent price here) caused a large-volume importation.

This leaves sellers of DDT in the Mexican sweepstakes with what some observers estimate to be two years' supplies—even should Montrose Mexicana and Diamond not run their plants.

The producers freely admit that it costs them more to make DDT in Mexico. It appears that they are relying heavily on the Mexican government to protect them from cheaper imports.

But even at that, how will they manage over the next two years? A spokesman

—Continued on page 40

DDT EXPORTS

1962	*85.0 million lbs.
1960	*55.0 million lbs.
1959	*70.0 million lbs.
1958	70.1 million lbs.
1957	64.1 million lbs.
1956	56.9 million lbs.
1955	53.3 million lbs.
1954	42.3 million lbs.
1953	31.4 million lbs.
1952	32.3 million lbs.

*Industry Estimate

Source: Department of Agriculture

GSA Is Offering 42 Short Tons Of the Government's Surplus Agar

General Services Administration is asking competitive bids on forty-two short tons of government-surplus agar. The material, located at the Erie Ordnance Depot, LaCarne, Ohio, is being offered in shredded, granulated and powdered form on an "as is-where is" basis. The agar, which may be inspected at the site, was originally purchased by the government for pharmaceutical purposes.

HEADS WESTERN PETROCHEMICAL: Maurycy Bloch, named president of the newly-formed Western Petrochemical Corporation, New York. Mr. Bloch will also serve as chief executive of Western Petrochemical's Warwick Division.

Bids will be opened on June 15 and may be made on lot or case units. Here's what's up for sale:

Nineteen lots of shredded agar varying in weight from a hundred pounds to 7,657 pounds; five lots of granulated agar weighing 184 to 1,390 pounds, and 365 cases of powdered agar containing 120 pounds each.

What Will It Do to Market?

What an offering of such size will do to the commercial market is a matter of conjecture. One trade source estimates that the US market for agar is somewhat under 280 short tons a year.

However, he feels that there is enough demand for the material here to keep the price from declining. "The market is hungry," he declares.

He points out that supplies at the sources — Europe and Japan—are very tight, adding that this year's Japanese crop is reportedly on the slim side.

On the other hand, another domestic supplier thinks that this flood of agar from GSA may depress the market. However, he says that the key factor is the quality of the government material—its color, age, etc.

Prices on agar have been heading upward steadily over the past month or so, mainly on the strength of reports of short crops in Europe and Japan. Kobe No. 1 strip is currently quoted at $2.10 a pound. That's 20 cents above the going price in early March.

Samples of the government's agar may be obtained by writing to the chief of the

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Armour Looks Over A Fertilizer Producer

Armour & Co., a Chicago meat packer with a yen for the fertilizer business, is taking a good close look at Mississippi River Chemical Company, hoping that it might be able to pick up this nitrogen fertilizer producer from its parent concern, Mississippi River Fuel Corporation.

The facility that has taken Armour's eye at the moment is a plant that was constructed in 1955 for $15 million. Its principal products include ammonia, nitrate solids and solutions, anhydrous ammonia, nitric acid and ammonia nitrate.

Production is said to total about 140,000 tons annually.

The Mississippi River Chemical plant

—Continued on page 57

GE Planning a Home For Its 'Lexan' Resin

General Electric Company's chemical materials department is going to build a permanent home for its tough, all-around polycarbonate resin, "Lexan," a new product for which the company has been nurturing great hopes.

GE has just selected a 160-acre site for the plant on the Ohio river, two miles southwest of Mount Vernon, Ind. Production from the new installation is expected to be ready for the market in the latter part of 1960.

For the past eighteen months output has been on a pilot plant and semi-works

—Continued on page 62

Studebaker-Packard Corp. Buys Out Gering Products

Studebaker-Packard Corporation, South Bend, Ind., has bought all of the stock of Gering Products, Inc.

Gering Products, located in Kenilworth, N.J., is a volume producer of plastic compounds, polyethylene film and plastic garden and industrial hose.

Gering will be operated as a separate division of Studebaker-Packard. It will be managed by Larry Gering and Herman Gering, who have directed the activities of the company since its inception.

The purchase price was not disclosed.

Petrochemicals in Mexico Being Expanded by Pemex

Mexico continues to broaden its base in the chemical industry. This time, it's in the form of additions to aromatic hydrocarbon facilities. Petroleos Mexicanos S. A. is putting up a Universal Oil Products "Udex" unit for manufacture of benzene, toluene and xylene.

Further, Pemex is starting construction of a "Hydrar" facility for cyclohexane production. The company will also construct two UOP platforming units and three "Unifining" units.

In conjunction with these facilities, necessary auxiliary equipment and other petrochemical producing facilities for production of agricultural chemicals will be installed at Minatitlan and other strategic places in Mexico.

REILLY TAR PRESIDENT: Peter C. Reilly, elected president of Reilly Tar & Chemical Corporation and its parent concern, Republic Creosoting Company, both Indianapolis, Ind. Mr. Reilly succeeds Carleton B. Edwards who has been elevated to the newly-created post of chairman of the two firms. Thomas E. Reilly, continuing as vice-president, will also serve as treasurer.

Phosphate Prospector Is Weighing on Sen. Moss's Mind

Sen. Frank E. Moss of Utah is thinking about the phosphate prospector. He has just devised a plan whereby prospecting for phosphate deposits would be stimulated and the rights of the successful prospector protected — all through the changing of federal filing requirements.

Together with Sen. James E. Murray of Montana, Sen. Moss has introduced a bill to provide for issuance of two-year prospecting permits and twenty-year preferences for successful prospectors to develop their finds.

"The existing law discriminates against the independent operator," says Sen. Moss, "and makes it unprofitable for him to prospect for phosphate."

"To qualify for a lease under present law, a party must outline a complete development plan and give as much information as possible about the deposit," adds the senator. "This information must then be advertised in a newspaper in the county in which the deposit is located, and a similar notice posted in the US Land Office.

"Such advertising encourages other applicants, such as companies with great financial resources who are already established in the business to come in. As allowed by present regulations, they demand competitive bidding on the lands. Too many times this eliminates the poor prospector who has made the discovery and done the development work that qualifies the property for leasing," he said. "This has driven the prospectors away from the search for phosphate."

"This bill will put phosphate under reg-

—Continued on page 47

German Chemicals Good in '58 But Not What They Had Been

German chemical men had a good thing of it last year, although their successes did not quite measure up to those of 1957. And the best informed word right now is that the trends seen in the chemical industry in Germany in 1958 are expected to continue this year. So says the Department of Commerce, which has just analyzed the German industry's activities for the past year. In many sectors, the chemical people continued to advance and set new production records, but the strength of the upward trend showed an easing tendency and the growth rates declined from those registered in 1957 .

Total chemical sales did well in 1958, increasing 5 percent to a record high value. Exports, however, ran up against sharper competition and managed to show a climb of only 2.5 percent.

Imports Up 7 Percent

German imports rose 7 percent and accounted for 11 percent of the domestic consumption during the year. Imports from the United States were largely responsible for this development—they increased by 15 percent.

Various sectors of the industry showed an uneven progress. Consumer chemical specialties were in the lead, with an increase of 10 percent. Industrial chemical specialties followed with a 7.5 percent increase.

The weakest showing last year was made by organic and inorganic industrial chemicals, with a 4 percent and a 2.8 percent increase, respectively.

The petroleum industry was characterized by heavy investment, expansion and new construction, with petrochemical products benefiting accordingly.

Direct subsidies and high exports of nitrogenous fertilizers were responsible for increases in production of fertilizers.

Production of paints and lacquers moved ahead by 10 percent, reversing the 1957 trend.

Dyestuffs output declined slightly in the face of a worldwide textile recession. Dyestuffs, it was noted, always count heavily on foreign sales.

Production last year in the pharmaceu-

—Continued on page 53

Chemical Fertilizer Plant Is Purchased in Canada

Electric Reduction Company of Canada, Ltd., has purchased a chemical fertilizer plant at Port Maitland, Ont., from Dominion Fertilizers, Ltd.

This modern plant produces phosphatic fertilizers, and its activities will be linked with the new multi-million dollar chemical project which Electric Reduction Company has announced for the Port Maitland area. Electric Reduction's other plants are at Buckingham and Varennes, Quebec, and North Vancouver, B.C.

TiO_2 Dumping Charge Rejected by Treasury

The Treasury Department has turned thumbs down on a complaint that Italian titanium dioxide is being sold in the United States at less than fair value, in violation of the anti-dumping act. Upon an investigation of the situation, the department gave the following reasons for rejecting the complaint:

"Sales for home consumption in Italy were of sufficient quantity to permit comparison with sales to the United States. Consequently, for fair value purposes, purchase price was compared to home market price. In calculating the latter, allowance was made for circumstances of sale peculiar to the home market such as selling, advertising, and warehousing expenses.

"During part of the period under con-

—Continued on page 52

Tantalum Price Is Cut By Union Carbide Metals

Increasing demand, which has been paced by expanded production facilities, has resulted in a lowered price for tantalum by Union Carbide Metals Company, a division of Union Carbide Corporation, New York.

The company said that the new price for high-purity tantalum melting stock (8M x D) is $35 per pound, down from $60 per pound.

Expanded production facilities also permit the firm to offer this tantalum melting stock in quantities of 400 pounds for immediate shipment.

Dow Raising LCL Prices On Forty Products July 1

A consumer price increase of one-half cent per pound on less-than-carload shipments for forty products in two major base lines has been announced by the Dow Chemical Company, Midland, Mich. The revision will become effective July 1.

Base line products affected by the change are ethylene oxide derivatives and propylene oxide and its derivatives. These include the industrial ethylene glycol (not including antifreeze), propylene glycols, ethanolamines and isopropanolamines, "Dowanol" products, polyethylene glycols and propylene oxide.

With the revision, Dow will raise the consumer price on less-carlot shipments from 1 cent to 1½ cents over the carload price. Distributor price schedules have also been changed. Consumer tankcar and carload shipments will not be affected by the revision, Dow said.

The Week's Price Changes

Copra, Linseed Meal, Olive Oil, Soybean Meal Advanced.
Clove Leaf Oil, Mercury, Methylene Chloride Reduced.

Prices Advanced

Linseed meal, $2 per ton (p. 56).
Olive oil, 5c. to 10c. per gal. (p. 56).
Soybean meal, 50c. per ton (p. 56).
Oleo oil, ¼c. per lb. (p. 56).
Oleostearine, ¾c. per lb. (p. 56).
Peanut oil, crude, ¼c. per lb. (p. 56).
Refd., ¼c. per lb.
Tin salts, ½c. to 3.5c. per lb. (p. 33).

Prices Reduced

Clove leaf oil, 2c. per lb. (p. 55).
Corn oil, crude, ½c. per lb. (p.56).
Refd., ½c. per lb.
Cottonseed oil, crude, ⅜c. per lb. (p. 56).
Refd., ⅜c. per lb.
Dried blood, Chicago, 75c. per unit-ton (p. 41).
Lard, cash, 1/10c. per lb. (p. 56).
Mercury, $2 per flk. (p. 33).
Methylene chloride, ¼c. per lb. (p. 43).
Soybean oil, crude, ⅛c. per lb. (p. 56).
Refd., ⅛c. per lb.
Tankage, N.Y., Chicago, 25c. per unit-ton (p. 41).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

June 5, 1959	May 29, 1959	June 6, 1958
110.29	110.30	109.82

Montecatini Unveils Polybutene

Another new "isotactic" plastic—polybutene—is on the horizon. Described in a paper authorized by Dr. Giulio Ballabio, head of the hydrocarbons and derivatives division of Montecatini, and presented by Dr. Bartolomeo Orsini, head of new projects and developments, at the fifth World Petroleum Congress in New York, the new plastic reportedly holds great potential in many areas of application. Included are sheets for vacuum and pressure forming, cable coverings, anti-corrosive coatings and liners for chemical vessels.

Because of its high tear strength, polybutene is said to have great possibilities as a film for wrappings and coatings. The new material is now in the pilot plant stage, according to Dr. Ballabio, and polybutene films have been successfully laminated to paper, aluminum foil, textiles and synthetic leathers.

Other Highlights of Conclave

Among other highlights at last week's international oil conclave were these:

- A prediction by Bernard T. Stott, a vice-president of the First National City Bank of New York, that the volume of world oil trade will double by 1967. He feels that the value of world oil shipments will rise to $20 billion by '67, which compares with $9.3 billion in '57.
- A report by a Russian oil specialist indicating that the USSR doubled its crude oil production between 1952 and 1957 and expects to triple its output by 1975. This would raise its production from the present level of 1.9 million barrels daily to 7 million barrels a day—about the present rate of output in this country.
- The disclosure by R. Buttin, director of the Petroleum Society of French Equatorial Africa, that the Sahara now ranks among the first ten oil-bearing areas of

—Continued on page 63

CENTRAL SOYA EXECUTIVE V. P.: Robert B. Parrott, elected an executive vice-president of Central Soya Company, Fort Wayne, Ind.

Arizona's Tall Oil Plant Contract Awarded Badger

Badger Manufacturing Co., Cambridge, Mass., has been awarded a contract for the design, engineering and contruction of a tall oil distillation plant, rosin treating unit and off-site facilities by Arizona Chemical Company, New York.

American Cyanamid Company and International Paper Company are the joint owners of Arizona Chemical.

The plant, which will have throughput of 120 tons per day of crude tall oil, will be constructed adjacent to the International Paper Company plant in Springhill, La.

Monopersulfate Installation Running Full Tilt: duPont

E. I. duPont de Nemours & Co. is in commercial production on "Oxone" monopersulfate compound, a new odorless household bleaching agent, at a new full-scale plant at Memphis, Tenn.

The new manufacturing unit is located on the site of duPont's hydrogen peroxide plant, which produces the basic material from which "Oxone" was developed.

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OIL, PAINT AND DRUG REPORTER, Vol. 175, No. 24, June 8, 1959. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland $7; other countries, $12. Copyright, 1959, Schnell Publishing Company, Inc.

UNION CARBIDE V. P.: William M. Haile, elected a vice-president of Union Carbide Corporation, New York. His former post as president of Carbide's Linde Company division has been taken over by William B. Nicholson.

Koppers Buys Up Carbide's 'Halowax'

Koppers Company, Pittsburgh, Pa., has just added another unit to its string of plants. The latest addition brings the total to seventy plants in thirty states, with an additional plant being located in Canada.

The recent acquisition is the "Halowax" plant of Union Carbide Corporation, New York, and is located at Wyandotte, Pa. Koppers has bought up the physical assets and inventory and, while the transaction was in cash, the amount was not disclosed

The new property produces chlorinated naphthalene, chlorinated paraffin and several other chlorinated chemicals and resins. It will be operated by the tar products division of Koppers.

The Pittsburgh company said no changes are contemplated in the personnel of the plant or its operation. Don H. Seeds, plant superintendent, has agreed to join the Koppers organization in the same capacity. Ultimately, it was said, Koppers hopes to add new products to the plant's line.

The "Halowax" plant is located on ground leased from the Pennsalt Chemicals Corporation. Koppers expects to sign a long-term lease for the use of the property and a number of buildings which are owned by Pennsalt.

Major raw materials used in the "Halowax" plant are chlorine and naphthalene. Chlorine is furnished by pipeline from

—*Continued on page 47*

Caprolactam in the USSR To Be Made by Irradiation

The Soviet Union has put up a unit to produce caprolactam via a photosynthetic route. The facility is part of the Armenian chemical complex of Kirovakan.

According to the German magazine *Chemische Industrie*, caprolactam will be produced by irradiation of cyclohexane and nitrosyl chloride — contrasted with current complicated multi-stage synthesis used in manufacture today.

Cyclohexane has been used as a starting material for caprolactam in Europe, and will be used in the new 60-million-pound-a-year plant being erected by E. I. duPont de Nemours & Co., at Beaumont, Tex.

National Aniline Division of Allied Chemical Corporation runs a 60-million-pound-a-year plant at Hopewell, Va., where caprolactam is derived from phenol.

Petroleum Aromatics Output Seen Moving Into the Big Time With 8 Billion Pounds in '65

Though they've come a long way in the past decade, petroleum aromatics are really only in their infancy. In fact, production—not quite a billion pounds in 1950—can be expected to rise to a total of some 8 billion pounds by 1965. This confident look into the future was given to the fifth World Petroleum Congress in New York's Coliseum last week by a quintet of oil specialists—H. W. Earhart, R. L. Heinrich, E. W. Lewis, T. M. Newsom and E. F. Wadley—from Humble Oil & Refining Company, Houston, Tex.

They believe that production of all petrochemicals will total around 55 billion pounds in 1960 and 85 billion pounds in 1965. This compares with a total petrochemical output of 31.5 billion pounds in 1950. Here, in billions of pounds, is how they think this overall production will break down:

Petrochemicals Output in 1960 and '65

	1965	1960	1955
Aliphatics	60.0	36.3	19.4
Aromatics	8.0	5.0	3.0
Inorganics	17.0	13.7	9.1
Total Petrochemicals.	85.0	55.0	31.5

Though today's supply of aromatic hydrocarbons, particularly toluene and the substituted benzenes, "far exceeds the actual volume of find end-products manufactured from them," the Humble Oil experts, nevertheless, expect "a severalfold" growth in the next decade.

"New end-uses will undoubtedly be found for those aromatic hydrocarbons commercially produced today," they point out, "and it is evident that new aromatic hydrocarbons that will become commercially available such as mesitylene, pseudocumene and durene will be employed in the manufacture of new end-products also."

Just where do petroleum aromatics stand today? Here's what Dr. Jerry McAfee, vice-president of the Gulf Oil Corporation, Pittsburgh, Pa., reports:

"Approximately one-third of the benzene, three-fourths of the toluene and nine-tenths of the xylene produced in the United States is now derived from petroleum."

Aliphatics, he adds, make up about 65 percent of all petrochemical production, and the chief raw materials for these are the light olefins—ethylene, propylene and butylene.

Inorganics, he notes, account for about a quarter of petrochemicals output and

—*Continued on page 57*

Lithium Corp. Says 'No' To American Ice Option

Lithium Corporation of America, Minneapolis, Minn., has let its option to buy control of American Ice Company lapse. The reason, say Lithium Corporation officials: It wasn't feasible.

It's believed that the company offered to buy American Ice's stock at under $30 a share, but this was turned down. If Lithium Corporation had bought the shares, it was also to make an offer to other American Ice stockholders at the purchase price within three months.

Lithium Corporation still has the right to sell its holdings of 13,992 shares of US Cold Storage Corporation stock to American Ice between November 1 and December 15. American Ice has voting control of US Cold Storage.

Game's All Gnatted Up

When an invasion of gnats halted play last week at a night baseball game in Chicago between the Chicago White Sox and the Baltimore Orioles, the chemical industry came through in the clutch. Umpire Hank Soar and White Sox bat boy John Rosisch, armed with aerosol containers of insect repellant, sprayed the pitcher's mound and the game went on.

Howard F. Roderick

Miles Labs Sets Up A Chemical Company

Miles Laboratories, Inc., has undergone a major corporate realignment, out of which has come a new organization—Miles Chemical Company. Set to function as one of the four main divisions of the parent organization, the new company will be headed by Howard F. Roderick as president.

Mr. Roderick joined Miles in January as a vice-president, and was recently named to the board of directors. Upon going to Miles, Mr. Roderick was made president of the Sumner Chemical Company division.

That unit, with production centered in Zeeland, Mich., has been consolidated with Takamine Laboratory Division in Clifton, N.J. and with the citric acid production facilities in the headquarters town of Elkhart, Ind., to form the new organization.

Administrative and marketing operations under the new arrangement will be in Elkhart. When announcement of the

—*Continued on page 63*

Signal Oil & Gas Deals Itself Into Petrochemicals

Signal Oil & Gas Company, Los Angeles, plans to enter the petrochemical field via the acquisition of Eastern States Petroleum & Chemical Corporation, Houston, Tex. The deal, now being worked out, involves an exchange of stock.

Eastern States has a 60,000-barrel refinery, a petrochemical plant and research center, located on the Houston Ship Channel, together with deepwater marine terminals and an interest in the Rancho Pipeline which extends from West Texas to Houston.

Its product line includes paint solvents, insecticides and plastics materials.

Signal Oil is one of the oldest independent oil companies on the west coast.

Foreign Business In Chemical Field Shatters Records

Foreign trade in chemicals and related products is tearing the pages out of the record book this year. For the second successive month, chemical imports went over the $30 million mark to reach a new high in April while exports, though declining slightly were still running at a lively pace.

Unless later months' records decline, indications are that both exports and imports will wind up the year with new peaks, with imports running in excess of one-third of $1 billion and exports approaching the $1.5 billion mark.

No Particular Reason Seen

Preliminary estimates of foreign trade in chemicals made public last week by the Bureau of the Census cite no particular reason for the rise in chemical foreign trade.

The statistics show no unusual rise in the imports of any particular commodities, leaving the inference that the increase is simply part of the upward trend taking place in all imports this year.

General imports hit a new high during the first three months of the year, although they fell back somewhat during April.

April imports of chemicals and allied products had a value of $31.2 million, the highest level on record, the Census bureau reported. These imports compared with $30.5 million in March and for the first four months of the year reached a total of $112.6 million. In April, 1958, the imports totaled $25.5 million and for the first four months were at a level of $97.1 million.

Exports in April slid off slightly to $119.9 million from the March total of $122.7 million. For January-April they totaled $474.7 million. Last year, April exports amounted to $114.5 million and for the first four months they were $446.3 million.

The four months totals for both exports and imports are the highest on record for any comparable period in the past.

Foreign trade generally amounted to $2,688.9 million during April, made up of $1,468 million of exports (including $125.1 million of military shipments) and $1,220.9 of imports. Foreign trade observers noted

—*Continued on page 62*

Dixon, American Sulphur Form Sulfuric Acid Firm

Dixon Chemical & Research, Inc., and American Sulphur & Refining Company have formed Dixon-Western Chemical, Inc., with eastern offices in Bloomfield, N.J., and western offices in Beverly Hills, Calif.

The new jointly-owned company plans to put up a 500-ton-a-day sulfuric acid plant at American Sulphur's 1,500-acre sulfur property at Sulphurdale, Utah.

The initial step toward an overall chemical complex will represent an investment of approximately $3.5 million.

Dow Becomes a Partner In Hawaii Plastics Concern

A company which will manufacture polyethylene film and film products in Hawaii has been formed by Pacific Chemical & Fertilizer Company, of Honolulu, and Dow Chemical Company, Midland, Mich. The firm, to be known as Hawaiian Extruders, Inc., will be located in Honolulu.

Monsanto Unit Completes New Facilities in Mexico

Monsanto Mexicana, S. A., a subsidiary of Monsanto Chemical Company, St. Louis, Mo., has completed installation of facilities to produce sodium tripolyphosphate (STP) and phosphoric acid at Lecheria, Mexico.

Phosphoric acid is already on stream. Commercial quantities of STP are expected to be available by July 1. The multi-million dollar installation reportedly makes Monsanto Mexicana the first Mexican manufacturer of these chemicals.

Boeing Jets Dip Company Deep Into the Paint Pail

Development of its 707 jet airliners for both commercial airlines and various federal services has plunged Boeing Aircraft Company pretty deep into the paint business. The company now maintains its own color laboratory and paint-tinting facilities in Renton, Wash., plus three paint-testing facilities at the same site, in Seattle, and in southern Florida.

According to the firm, the color laboratory, now a little over a year old, has already developed and put into use some sixty odd exterior shades and over 150 interior colors. The lab has also developed its own blending formulas, and does its own testing for viscosity, exposure and color-matching for specific lighting conditions.

Where the quantity of paint required is not excessive, the lab produces its own paints, Boeing says. For quantity needs, outside suppliers are contracted, with the lab maintaining color standard and quality control tests.

The Boeing lab has also cooperated with outside manufacturers in developing special coatings for such projects as scuff resistance for molded fiberglass, chemical and solvent resistance for the vertical tail rudder and other highly exposed areas, and added protection for center sections.

Actual painting of the big jet airliners takes place in a special "painting hangar" at the Renton plant. A three deck scaffolding fits around the individual plane for exterior painting purposes.

The majority of exterior coatings used are epoxy type, capable of withstanding extremes in weathering, temperature changes and high speeds. Interior paints run the gamut from glossy to flats, and

—*Continued on page 53*

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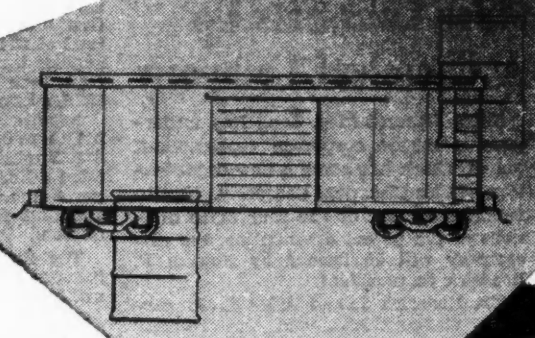

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Plastic Bag Campaign On

The Society of Plastics Industry, still worried about the wave of suffocation deaths from plastic bags, has just swung into a safety campaign aimed to put a halt to them.

Earlier, SPI had teamed up with plastics film manufacturers and the National Safety Council (OPD, 5/18/59), to begin educating the public to the good and bad sides of plastic bags. Last week SPI began distribution of a pamphlet: "Plastic Film—Correct Use and Misuse—With Helpful Hints to Parents."

The booklet is aimed primarily at parents because the preponderance of fatalities has been among infants and small children (though a surprising rise has been marked in the incidence of adult suicides with the plastic film containers).

Chief aim of the SPI campaign is to get the public to discard the plastic bag after its initial use. The organization figures that with the public educated and the bag out of the way, deaths will take a big dip.

Says William T. Cruse, SPI executive vice-president, "The adoption of plastic film for garment bags, packaging of fruits and vegetables, and many other purposes is an advance in our modern way of living. Just as infants and young children are not permitted to play with medicines, sharp objects, and matches, they should not be exposed to ultra thin plastic film, which might cling to their faces upon inhalation, or in which they might become entangled. Once the plastic bag or covering has served its original intended purpose, it should be destroyed."

The plastics society, as a public service, has also prepared a special placard for dry cleaners to inform parents of the hazards of re-using thin plastic film garment coverings for improvised covers on cribs, playpens and upholstery.

Fluorine, Tomorrow's Rocket Fuel, Spending Time at Pedestrian Tasks

A high energy fuel—potentially the hottest thing in the stratosphere—is waiting patiently for a chance to bow into the atomic era. The substance, fluorine, when mixed with hydrogen, is reportedly the most powerful of the high energy fuels. There's a rub, however. Problems of storage and handling at present impose severe limitations on the applications of the gas. And so in lieu of the glamor career as a high flier, fluorine finds employment along more pedestrian lines, i.e., in chemical compounds used chiefly in the production of aluminum, refrigerants, aerosols, and uranium.

DEVELOPMENT MANAGER: W. Frederick Luckenbach, jr., named general manager of its newly-created commercial development department by Foote Mineral Company, Philadelphia.

In a report on the gas, Harris, Upham & Co., New York investment brokers, commented in its quarterly publication, "Science and Securities," that "since fluorine in liquid form or in combination is a highly explosive and reactive material, serious limitations have been imposed upon its use in the high energy fuels program."

"However," it was added, "the government, with the cooperation of private industry, is conducting tests with fluorine and its compounds, such as chlorine trifluoride and bromide pentafluoride. It is anticipated that fluorine will eventually play an important part in the launching of space vehicles."

The stratosphere may answer for fluo-

—*Continued on page 37*

SOCMA Meets Tomorrow

The Synthetic Organic Chemical Manufacturers Association will meet tomorrow (June 9) in the Roosevelt hotel, New York. Guest speaker at the meeting, John L. Harvey, deputy commissioner of food and drugs in the Department of Health, Education and Welfare, will talk on additives in the chemical industry. Cocktails will be at noon and luncheon at 12:30.

Chemical Buyers to Hear Value Analysis Addresses

Chemical Buyers Group of the National Association of Purchasing Agents at its annual meeting, to be held June 16 at the Waldorf-Astoria hotel, New York, will hold a panel discussion on "Cost Reduction Through Value Analysis in Chemical Buying." Panelists will be:

W. Gretsch, director of purchases for Warner-Chilcott Laboratories; Elmer Hartgerink, purchasing agent for Sumner Chemical Company; C. T. Kline, jr., chemical buyer for American Viscose Corporation, and E. J. Rockefeller, manager of purchasing research and analysis for General Foods Corporation.

Synthetic Rubber Manufacture Finds Soviets Making Big Push On Three Technological Routes

Russia is making a big push to better the technological process and the quality of its butadiene-styrene and butadiene-methylstyrene rubber. The Soviets are approaching the problem by three major routes which they hope will lead to more economic emulsifier use. The prongs of the attack are: (a) application of more active initiators, (b) selection of new types of emulsifiers, and (c) the preparation of soft rubbers which do not require thermoplastification. Latest word on this and other USSR developments in synthetic rubber was disclosed in an article by M. Gordin, printed in a publication of Britain's Society of Chemical Industry.

Says Mr. Gordin: A great deal of time has been devoted to research on the preparation of silicate oil-filled rubber and also to the selection of different types of mineral oils.

See Quality, Cost Gains

And the Russians are confident that as a result of all this labor there will not only be a great improvement in the quality of these rubbers but also an appreciable lowering of their cost.

Another major element in the present Soviet synthetic rubber picture is the not yet completed switch-over from the use of basic materials (which could be better utilized for other purposes) to cheaper basic products derived from natural and oil-refinery gases.

When this is accomplished, Mr. Gordin says, further development of synthetic rubber from alcohol will not be needed. All newly-constructed plants as well as some of the existing ones, if necessary, will then produce butadiene prepared by dehydrogenation of butane (resources of which, Mr. Gordin points out, are practically unlimited.)

Aside from new directions being taken in the process of making the synthetics, just what final synthetic is the USSR looking to? Mr. Gordin has a complete answer.

"In the past large-scale planning of synthetic rubber production has included only rubber of general-purpose specifications, chiefly butadiene-styrene, butadiene-methylstyrene and isoprene rubber, the general idea being to reduce output of sodium-butadiene rubber.

"Future plans include production of special-type rubbers which, although different from natural and other synthetic

—*Continued on page 35*

UPJOHN CHEMICAL SALES CHIEF: W. H. DeCou, named director of the chemical sales division of the Upjohn Company, Kalamazoo, Mich., to succeed R. C. Byce who is retiring.

Ward Jackson Is Honored By Army Chemical Corps

US Army Chemical Corps has paid special tribute to W. Ward Jackson, vice-president of Commercial Solvents Corporation, New York, in ceremonies held at the Army Chemical Center, Edgewood, Md.

Mr. Jackson, the past president of the New York chapter of the Armed Forces Chemical Association, was given a plaque and certificate of achievement for outstanding contributions to the Army Chemical Corps.

Making the presentation was Maj. Gen. Marshall Stubbs, Army Chief Chemical Officer. In attendance were over seventy of Mr. Jackson's fellow industry associates, all members of the New York AFCA. The Army Chemical Center was host to the group at a day-long series of orientation tours and briefings.

Elastomers in 1958 Were Off a Little Bit

Elastomers did not do quite so well in the United States last year, says the Tariff Commission in releasing its annual report on production and sales for the principal types during 1958.

The total domestic output of all types amounted to 2,202 million pounds in 1958, which was slightly below the 2,354 million pounds reported for the previous year.

Sales of elastomers covered by the report amounted to 2,008 million pounds, compared with 2,009 million pounds in the previous year. They were valued at $544 million in 1958, and $577 million in 1957.

The production of cyclic elastomers, consisting chiefly of the polybutadiene-styrene type (S-type), amounted to 1,753

—*Continued on page 50*

Fertilizer-of-Future Theme Set by Plant Food Institute

Fertilizers of tomorrow will be the main theme of the fourth annual convention of the National Plant Food Institute, set for June 14 to 17 at the Greenbrier hotel, White Sulphur Springs, W. Va.

Rep. Jamie L. Whitten of Mississippi, chairman of the house subcommittee on agricultural appropriations, will be the featured speaker on June 16. His subject will be "What's Happening in Federal Farm Programs."

Richard E. Bennett of Omaha, Nebr.,

—*Continued on page 44*

Association Meetings

Air Pollution Control Association, annual meeting, Statler-Hilton hotel, Los Angeles, June 22-26.

American Association of Textile Chemists & Colorists, annual meeting, Shoreham hotel, Washington, D. C., October 8-10.

American Chemical Society, national meeting, Atlantic City, N. J., September 13-18.

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 19-20.

American Leather Chemists Association, annual meeting, Grand hotel, Mackinac Island, Mich., June 14-17.

American Pesticide Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 16-17.

American Pharmaceutical Association, annual meeting, Netherlands-Hilton hotel, Cincinnati, Ohio, August 16-23.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 21-26.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 14-15.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 12-14.

Chemical Buyers Group of the National Association of Purchasing Agents, annual meeting, Waldorf-Astoria hotel, New York, June 16.

Chemical Industry Association, annual convention, Wake Robin Inn, Lakeville, Conn., June 12-14.

Drug, Chemical & Allied Trades section of the New York Board of Trade, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 17-20.

Electrochemical Society, Deshler-Hilton hotel, Columbus, Ohio, October 18-22.

Federation of Paint & Varnish Production Clubs, annual convention, Convention Hall, Atlantic City, N. J., October 22-24.

Kentucky Fertilizer Conference, annual meeting, Univ. of Kentucky, Lexington, July 29.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-13.

National Agricultural Chemicals Association, annual meeting, Sheraton Lick hotel, French Lick, Ind., October 21-23.

National Paint, Varnish & Lacquer Association, annual convention, Chalfonte-Haddon Hall, Atlantic City, N. J., October 19-21.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 14-17.

Paint Industries' Show, sponsored by Federation of Paint and Varnish Production Clubs, Convention Hall, Atlantic City, N. J., October 20-24.

Parenteral Drug Association, Sylvania hotel, Philadelphia, June 12.

Society of Chemical Industry, annual meeting, Glasgow, Scotland, July 6-11.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, June 9.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, June 5 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p. bbls. dms., lb. .41 - .50
Acetaldehyde, 99% dms., c.l. works, lb. .12 - —
dms., l.c.l., works ..... lb. .13¼ - —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs. c.l., frt alld lb. .32½ - —
bbls., bgs., ton lots, frt alld. lb. .33½ - —
bbls., bgs. smaller tots, frt. alld lb. .36½ - —
USP, bbls., 225-lb dms any quantity lb. .79 - —
100-lb dms., any quantity lb. .81 - —
Acetic acid, coml or redist., 23%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms. dlvd 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. .. 100 lbs.13.75 - —
dms., l.c.l., dlvd. ... 100 lbs.14.25 - —
tanks, dlvd ... 100 lbs.10.00 - —
USP, cbys., dlvd ... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½ - —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. ... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ... lb. 1.38 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd. ... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. . lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½ - —
tanks, dlvd. ..... lb. .03½ - —
Acetonitrile, dms., c.l., works... lb. .45 - —
dms., l.c.l., works ..... lb. .45¾ - —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾ - —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol. 1,000-lb. lots, frt adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½ - .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½ - —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (60 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .53¼ - —
Freight equald. shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½ - —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½ - —
tanks, frt. alld E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½ - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½ - —
tanks, frt. alld. E of Denver lb. .37 - —

Acids

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾ - —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms. l.t.l., dlvd. lb. .65 - —

Abies Siberica Oil—Ammonium Bicarbonate

Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., t.l.l., frt. equald lb. .31 - —
tanks, frt. equald ..... lb. .27 - —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼ - —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar USP Kobe No 1, strip, bls. lb. 2.10 - —
powd., 30 mesh., fib., dms lb. 2.40 - —
dl Alanine, dms. works ..... lb 8.50 -11.00
Aldol, 95%, dms., l.c.l. ..... lb. .23 - —
Aldrin, tech. fib. dms., c.l., t.l., dlvd lb. .93 - —
fib. dms., l.c.l., dlvd ..... lb. .98 - —
Aletris root, bgs. ..... lb. 1.75 1.85

Alcohols

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls, same basis. lb 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90% dms., frt. alld lb.28.80 -28.90
Soln., 20% dms., 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ... lb. .32½ - —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb cbys., 55 to 990 lbs. works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½ - —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms. ..... lb. .75 - 1.30
Aloe, Cape, cs. ..... lb. .35 - .49
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .80 - —
Aloin, USP, bbls., dms., kgs. ... lb. 3.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs. 5.05 - —
powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾ - .08
Alum, potassium, gran. bgs., works. 100 lbs. 4.55 - —
lump, dms., works ..... 100-lbs. 5.30 - —
powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾ - .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works, lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼ - .08
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .18 - —
dms., l.c.l., works ..... lb. .18½ - —
cryst., dms., c.l. works 100 lbs.21.00 - —
dms., l.c.l., works .... 100 lbs.21.50 - —
soln., 32° cybs., c.l., works... lb. .0135- —
cbys., l.c.l., works ..... lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ - —
bgs., l.c.l., works ..... lb. .18¼ - .20¼
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l. works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½ - —
bgs., 20,000-40,000 lb. lots, same basis lb. .03¾ - —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¼ - —
bulk, c.l., same basis ..... lb. .03¼ - —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½ - —
fib. dms., contract, works lb. .79½ - —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
fib. dms., contract, works.lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2690 - —
pigs, 10,000-lb. lots, frt. alld lb. .2470 - —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½ - —
Standard grade, dms. ..... lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb. 1.11 - —
Standard grade, dms ..... lb. .81 - —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% t.t.l., dms lb. .36¼ - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
grd., bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
Coml., iron-free, bgs., c.l., works, frt equald 100 lbs. 3.60 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.20 - 5.30
USP, gran., dms., works .... lb. .30 - —
powd., dms., works ..... lb. .37 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton.88.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., cl., works, frt, equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325.00 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Abbreviations

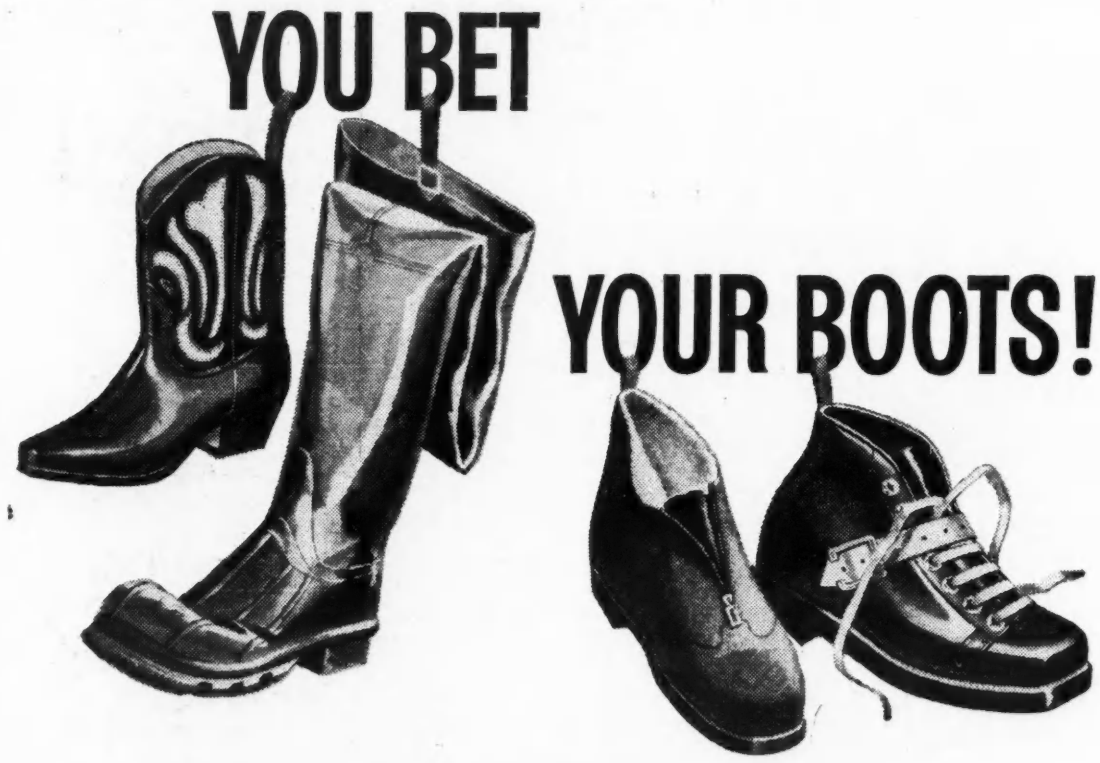
Used in OPD Market Quotations

alld	allowed
amorph	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a	available phosphoric acid
approx.	approximately
artif	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
I &a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Ammonium Bichromate—Ash Black

Ammonium bichromate, dms., works, lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, 450-lb. bbl., frt. equald lb. .45 - —
100 lb. dm., frt. equald lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½ - —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs 5.75 - —
bgs., l.c.l., works 100 lbs 7.75 - 8.20
USP, gran., 6lb. dms. lb .17¼ - —
Ammonium citrate dibasic, 250-lb. dm., f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½ - —
dms., l.t.l., frt. alld lb. .21½ - —
tanks, frt. alld lb. .19½ - —
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium lignin sulfonate bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium molybdate, CP, cryst., fib. dms., 15,000 lbs., works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb. 1.23 - —
single fib. dms., works lb. 1.24 - —
Ammonium nitrate, dom. fertilizer grade, 33.5% N bags., f.o.b. works ton.68.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton, base price. ton.68.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.45.50 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½ - —
powd., 200-lb. dm., same basis lb. .28½ - —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse. 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF V, bbls., dms lb. .46 - —
Ammonium phosphate, tech., bgs., c.l., works, frt. equald, lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾ - .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½ - .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
purif., bgs., f.o.b. works lb. .08½ - .15
large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., l.t.l., works—100 lbs 3.20 - 7.20
Ammonium sulfide, liq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms. c.l. works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
Highly purif., cbys., 100% basis. lb. 1.70 - 1.90
d-Amphetamine hydrochloride, di-basic, bots lb.17.50 -23.00
dl-Amphetamine hydrochloride, di-basic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, mono-basic, dms lb.17.50 -21.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.13.00 - —
dl-Amphetamine phosphate, dms lb. 4.20 - 5.00
d-Amphetamine sulfate, fib. dms., lb.13.60 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½ - .19
dms., l.c.l., same basis lb. .20 - .20¼
tanks, same basis lb. .16 - .16⅛
Amyl acetate, ex pentane, reg. dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .16½ - —
Tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½ - —
tanks, dlvd. lb. .16½ - —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½ - —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld lb. .20½ - —
tanks, frt. alld lb. .16½ - —
primary, dms., c.l., frt. alld. lb. .19¾ - .20¼
dms., l.c.l., frt. alld lb. .21¼ - .21¾
tanks, frt. alld lb. .17¼ - .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½ - —
tanks, works. lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½ - —
tanks, frt. alld. E lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.75 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾ - —
dms., l.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms. lb. .80 - 1.10
Amyris oil, dms lb. 1.50 - 1.90
Anethole, USP, cns., dms lb. 1.15 - 1.50
Tech., dms. lb. .85 - .90
Angelica root, bls. lb. .90 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots. lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs lb. .22 - —
Spanish, bgs. lb. .20 - —
Anisic aldehyde, dms. lb. 1.35 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½ - —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dms lb. .69½ - —
USP, powd., 250-lb. dms. lb. .74½ - —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .75 - 1.00
Arabic gum, amber sorts, 10 bgs. lb. .23 - .25
USP, powd., bbls lb. .28 - .32
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tin oz. 4.00 - 4.50
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine hydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .85 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms lb. .48 - —
Arsenic white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l., works lb. .06½ - .07⅛
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton.86.00 - —
7D, c.l. (30 tons) mines ton.75.00 - —
7F, c.l. (30 tons) mines ton.71.00 - —
7H, c.l. (30 tons) mines ton.61.00 - —
7K, c.l. (30 tons) mines ton.50.00 - —
7M, c.l. (30 tons) mines ton.44.00 - —
7R, c.l. (30 tons) mines ton.43.00 - —
7RF, c.l. (30 tons) mines ton.44.00 - —
7T, c.l. (30 tons) mines ton.41.00 - —
7TF c.l. (30 tons) mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. kilo.10.35 - —
5-kilo dm kilo.10.75 - —
1-kilo bottle kilo.11.60 - —
500-gram bottle kilo.11.50 - —
Ash black (see Barium sulfide).



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Asphalt, gilsonite, black jet, bgs., c.l., mines ton 40.00 - —
ex-whse, N. Y., N. J. ton 86.50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton 35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton 40.00 - —
Manjak No. 10 crude, dms., works, lb. .07 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion tanks tankwagon, refy, gal. .09½ - —
Asphalt, petroleum, steam-refd., 50-80 penetration, tanks, tankwagon, refy ton 21.00 - —
85-300 penetration tanks, tankwagon, refy ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 - 6.50
Atropine sulfate, USP, bots oz. 6.25 - 6.75
Avocado oil, f.o.b. Calif., cns. lb. 2.25 - 3.00

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units, 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs. lb. .50 - —
Barbital, NF, 100-lb dms. lb 4.50 - —
Barbital sodium, NF, dms lb 4.75 - —
Barium carbonate precip bgs., c.l., works ton 111.50 - —
bgs. smaller lots, works ton 126.50 - —
Barium chlorate, dms. works lb .32 - .41
Barium chloride, anhyd bgs. c.l., works ton 176.00 - —
bgs., l.c.l. works ton 195.00 - —
Barium chloride, NF, cryst., 100 lb dms lb .22 - —
Tech., cryst., bgs. c.l., works 100 lbs 7.00 - —
bgs., l.c.l., works 100 lbs 8.00 - —
Barium chromate, bgs. frt. equald lb .38 - —
Barium dioxide (see Barium peroxide)
Barium hydrate, cryst., bgs. c.l. t.l., frt. equald ton 208.00 —
bgs. l.c.l. t.l. frt equald ton 218.00 —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate bbls c.l. t.l. dlvd lb 16 - —
bbls. l.c.l. t.l. dlvd lb 17 - —
Barium oxide grd., dms. c.l. t.l., frt equald ton 275.00 —
dms. l.c.l. t.l., frt. equald. ton 285.00 —
Barium peroxide dms. frt equald lb 20 - —
Barium stearate ctns. c.l. frt alld. lb. .41 - —
ctns., l.c.l., same basis lb 42 46
Barium sulfate, tech (see Barytes and blanc fixe)
Barium sulfate, X-ray, 100-lb. dm.lb. .19½ - —
Barium sulfide dms. c.l., works ton 100.00 - —
dms., l.c.l., works ton 110.00 - —
Barytes, southern off-color, bgs. mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 —
white water-grd., paper bgs., c.l., St. Louis ton 55.00 - 55.25
paper bgs. ex whse., New York ton 79.85 —
Battery acid, chys c.l. works, E. 100 lbs 2.35 —
chys., l.c.l., works, E. 100 lbs 2.65 - 10.95
Bauxite, bulk, mines ton 7.00 - 10.00
Bay oil, N. Puerto Rican, 50-55% cns lb. 2.25 - 2.75
55-60%, cns lb 2.50 3.00
West Indian 50-55% cns. dms., lb. 2.30 3.00
Bayberry wax, bgs. lb. .45 .47
Beeswax, crude, African, bgs. lb. .55 - .56
Brazilian, bgs. lb. .56 - .57
Central American, bgs. lb. .53 .54
Chilean, bgs. lb. .56 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns. lb. .69 - .70
yellow, bricks, 100-lb. ctns. lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom 200 mesh, bgs., c.l., mines ton 14.00 - —
Imp Italian, white, high gel., bgs., 5-ton lots, ex whse ton 91.00 - —
bgs., 1-ton lots, ex whse ton 94.00 - —
low gel., bgs., 5-ton lots ex whse ton 89.35 - —
bgs., 1-ton lots, ex whse ton 92.35 - —
Benzal chloride, chys., works lb. .44 - —
Benzaldehyde, NF, dms. lb. .80 - .86
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
Geneva, Utah gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal. .31 - —
Lorain, Ohio gal. .31 - —
Middletown, Ohio gal. .31 - —
Minnequa, Colo. gal. .31 - —
Philadelphia district gal. .31 - —
Pittsburgh district gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825 - —
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825 - —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —
Benzoin gum, Sumatra, cs. lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzophenone, dms lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, chys., 1,000-lb. lots or more, frt., equald lb. .21 - —
chys, smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, chys., dms., c.l., works, frt., equald lb. .22 - —
chys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd. lb. 47½ - .65
Benzyl benzoate, USP NF, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., chys., dms., c.l., works, frt., equald lb. 22½ - 25½
chys., dms., l.c.l., same basis lb. 23½ - 25½
tanktrucks, dlvd., Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal chys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works, lb. 2.25 - —
Benzyl formate, cns. lb. 1.85 - 2.10
Benzyl isoeugenol, cns. lb. 9.50 - —
Benzyl propionate, bots. lb. 1.35 - 1.65
Benzyl salicylate, bots. lb. 1.60 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, cns. lb. 48.50 - —
Berberine hydrochloride, bots. lb. 48.50 - —
Bergamot oil, nat., NF, Italian cns. lb. 12.75 - 13.75
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.)
Biotin, cryst., bots. gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. lb. 1.50 - 1.90
Rectified, cns. lb. 1.75 - 2.00
Bismuth chloride, fars lb. 5.11 - —
Bismuth hydroxide, dms. lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots lb. 2.25 - —
Bismuth nitrate cryst. dms. lb. 2.08 - 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP dms. lb 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, NF, fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt alld lb. .29½ - —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l. same basis lb .31 - —
Blackberry root bark, bls. lb .50 - .55
Black haw root bark bls. lb .63 - .65
Black haw tree bark, bls. lb 45 .50

Black Pigments

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Eastman Aldehydes

acetaldehyde
pharmaceutical raw material
denaturant
chemical intermediate

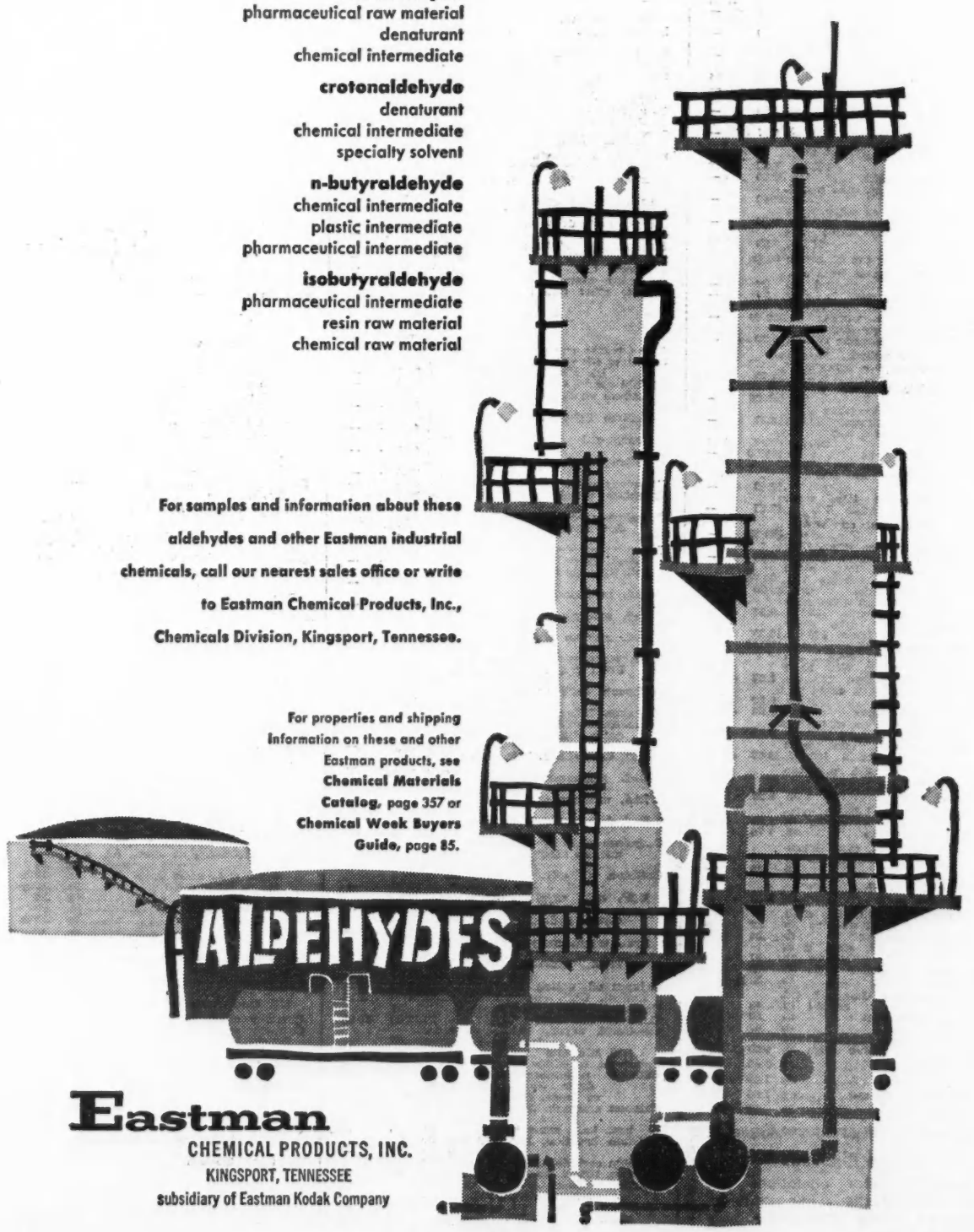
crotonaldehyde
denaturant
chemical intermediate
specialty solvent

n-butyraldehyde
chemical intermediate
plastic intermediate
pharmaceutical intermediate

isobutyraldehyde
pharmaceutical intermediate
resin raw material
chemical raw material

For samples and information about these aldehydes and other Eastman industrial chemicals, call our nearest sales office or write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee.

For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 357 or **Chemical Week Buyers Guide**, page 85.



Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tenn.; Atlanta, Ga.; Chicago; Cincinnati; Cleveland; Framingham, Mass.; Greensboro, N.C.; Houston; New York City; St. Louis. West Coast: Wilson Meyer Co., San Francisco; Denver; Los Angeles; Phoenix; Portland; Salt Lake City; Seattle.

Blanc fixe, direct process, bgs. c.l., works ton.145.00 - —
bgs., l.c.l., works ton.155.00 - —
bgs., l.c.l., New York whse ton.195.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 6.25 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago. unit-ton. 6.00 - —
Bloodroot, bls lb. .48 - .50

Blue Pigments

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb 1.90 - 2.55
Peruvian, dms. lb 1.80 - 2.25
BON acid maroons, pure, bbls lb 1.75 - —
Resinated, bbls. lb 1.50 - —
Bone black, dms., l.c.l. frt. alld lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd., 98½%, bgs., c.l., works ton.87.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.19 - —
bgs., smaller lots, same basis 100 lbs. 8.44 -10.44
bulk, c.l., works ton.78.50 - —
gran., decahydrate 99½%, bgs., c.l., works ton.47.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.19 - —
bgs., smaller lots, same basis. 100 lbs. 6.44 - 8.44
bulk, c.l., works ton.41.00 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.63.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.97 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis. 100 lbs. 7.22 - 9.22
bulk, c.l., works ton.56.50 - —
powd., 99½% bgs. c.l., works. ton.52.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.34 - —
bgs., smaller lots, same basis. 100 lbs. 7.59 - 9.59
USP borax $15 per ton higher in bags.
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.50 - —
Boric acid, tech., anhyd., 99.99% bgs., smaller lots, same basis, 100 lbs.21.75 -23.75
cryst., 99.9%, bgs. c.l. works. ton.160.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.10.87 - —
bgs., smaller lots, same basis. 100 lbs.12.12 -14.12
dms., c.l., works ton.185.00 - —
dms., ton lots, ex whse, New York or Chicago. 100 lbs.12.12 - —
dms., smaller lots, same basis 100 lbs.12.87 - —
gran., 99.9%, bgs., c.l., works. ton.108.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.29 - —
bgs., smaller lots, same basis ton.170.75 - —
dms., c.l., works ton.133.50 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.54 - —
dms., smaller lots, same basis 100 lbs.10.29 - —
bulk, c.l., works ton.102.50 - —
powd., bgs., c.l., works, ton lots, ex whse, New York or Chicago 100 lbs. 8.07 - —
bgs., smaller lots, same basis. 100 lbs. 9.92 -11.92
dms., c.l., works ton.141.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.92 - —
dms., smaller lots, same basis 100 lbs.10.67 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls., works lb 1.70 - —
Boron trifluoride gas, cyls, truckload, works lb. .62 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
c.s., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l. dlvd E of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. chys lb 1.80 - 1.90
Bromstyrol, bots. lb 5.45 - 5.70
Brucine, cns. oz. 1.50 - 1.75
Brucine sulfate, NF, cns. oz. 1.50 - 1.75
Buchu leaves, bls. lb. .95 - 1.05

Brown Pigments

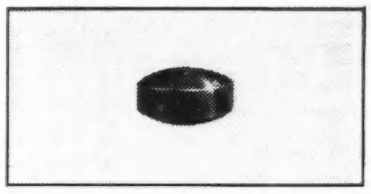
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb 21 — —
cyls., l.c.l., refy lb .22 - —
tanks, dlvd. lb. .14½ - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½ - —
dms., l.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18½ - —
tanks, frt. alld lb. .14½ - —
Syn., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., frt. alld lb. .18½ - —
tanks, dlvd lb. .14½ - —
Butyl alcohol, sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Butyl alcohol, tert-synthetic, dms., c.l., frt. alld. dlvd. E lb. .15 - —
dms, l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb .32 - —
Butyl phenylacetate, dms., lb 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E of Mississippi lb .27¼ - —
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tri-butylamine)
6-tert-Butyl-m-cresol (see mono-tert-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol)
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½ - —
tanks, dlvd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

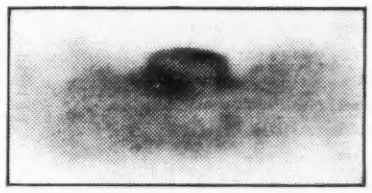
C

Cacao butter (see Cocoa butter)
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.35 - —
Light shade, bbls., same basis lb. 4.45 - —
Medium shade, bbls., same basis. lb. 5.10 - —
Medium light shade bbls., same basis lb. 4.70 - —
Orange-red shade, bbls., same basis lb. 4.10 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 3.65 - —
Cadmium iodide, 25-lb fib dms lb 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.58 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis. lb. 1.88 - —
Red, light shade, bbls., same basis. lb. 1.65 - —
Red, medium shade, bbls., same basis lb. 1.80 - —
Red, medium light shade, bbls., same basis lb. 1.73 - —
Red, maroon shade, bbls., same basis lb. 1.96 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld. E. of Rockies. lb. 2.69 - —
Maroon, dark shade, bbls., same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.51 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.59 - —
Red, light shade, bbls., same basis. lb. 1.81 - —
Red, medium-light shade, bbls., same basis lb. 1.93 - —
Red, medium shade, bbls., same basis lb. 2.16 - —
Red, dark shade, bbls., same basis. lb. 2.49 - —
Cadmium-selenide, lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.12 - —
Caffeine, NF, citrated, cms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Syn., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native cns. lb. 1.75 - 2.55
Redist., USP, cns lb. 1.90 - 2.10
Calamine, USP, dms. lb .34 - —
Calamus oil, bots lb.12.00 - 20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Calcium carbonate, precip., dense, bgs. c.l., works ton.30.00 -35.00
bgs., l.c.l., works ton.45.00 -50.00
medium, bgs. c.l., works ton.38.00 —
bgs., l.c.l., works ton.48.00 —
Calcium carborate, precip., surface treated, bgs., c.l., works. ton.40.00 -42.00
bgs., l.c.l., works ton.55.00 -57.00
ultrafine, bgs., c.l., works ton.117.50 -167.50
bgs., l.c.l., works ton.137.50 -167.50
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton.37.80 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 - —
Purif., gran., dms. lb. .27 - —
USP, gran., dms. lb. .32 - —
Liquor, 40%, tanks, frt. equald. ton.12.50 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 1.95 - —
Calcium gluconate, USP, powd., 150-lb. dm., ton lb. .66½ - —
AA, 150-lb. dm., ton lb. .73½ - —
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies. cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
dms., smaller lots, works lb. .41 - .48
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, 1-kilo or more. kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms. lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.83.25 - —
bgs. c.l., t.l. f.o.b. Texas City works ton.77.70 - —
bgs. l.c.l., frt. equald ton.93.25 - —
21% P., bgs., c.l., t.l., frt. equald. ton.94.50 - —
bgs., l.c.l. frt. equald ton.104.50 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic, NF, precip., bgs. c.l., works, frt equald 100 lbs. 9.25 - —
bgs., l.c.l. frt. equald. 100 lbs.10.00 - —
Calcium phytate bgs., works lb. .50 - —
Calcium resinate precip, dms ton lots, frt. alld., works lb. .36¼ - —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½ - —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns. c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd., 100-lb. dms. lb. 5.42 - —
Camphene 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Camphor, nat., USP, powd., cs., 100-lb. lots lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .85 - —
ctns. 500-lb. lots lb. .86 - —
ctns. smaller lots lb. .87 - —
tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb. 6.50 - 7.00
Rectified, cns. lb. 8.25 -10.00
Candelilla wax, crude, bgs. lb. .53 - .54
Refd., bgs. lb. .57 - .59
Powdered Candelilla wax 20 to 100 mesh, 8c. higher
Cantharides, Chinese, cs. lb. 1.25 - —
powd., bxs. lb. 1.75 - —
Russian, bgs. lb. 2.25 - —
powd., bxs. lb. 2.75 - —
Capric acid, dms lb. .35½ - .38
tanks lb. .33 - —
Caprylic alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½ - —
tanks, frt. equald lb. .16½ - —
Sec. 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½ - —
Caprylic acid, dms lb. .35½ - .38
tanks lb. .33 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - 4.75
NF, from African pepper, dms lb. 4.50 - 5.25
Caraway oil, dms lb. 3.10 - 3.50
Caraway seed, Danish, bgs. lb. .12¼ - —
Dutch, bgs. lb. .13 - —
Polish, bgs. lb. .12 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., works lb. .15½ - —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾ - —
ctns., l.c.l., whse. lb. .13½ - —
high abrasion bulk, c.l., works. lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., dlvd. or whse lb. .14½ - —
high modulus, bgs., c.l., works. lb. .06¼ - —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾ - —
bgs., ctns., l.c.l., whse. lb. .12½ - —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed, bgs., c.l., works lb. .13½ - —
bgs., l.c.l., dlvd. or whse lb. .22 - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E. ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, Metropolitan areas, E. ton.55.00 - —
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545 - —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾ - —
dms., l.c.l., frt. alld. lb. .15¼ - —
Carbon tetrachloride, tech., consumers, dms., c.l., t.l., frt. alld. lb. .11¾ - —
dms., l.c.l., t.l., frt. alld lb. .14¼ - —
tanks, frt. alld. lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots. lb.41.50 -45.00
Cardamom seed, bleached "A" lb. 2.95 - —
Bleached "B" lb. 2.95 - —
Decorticated Alleppey, cs. lb. 2.85 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs. lb. 2.00 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb.16.80 - —
bulk, smaller lots, dlvd. lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .70 - .72
North country, No. 2, crude, bgs., ton lots lb. .82 Nom.
Refd., pure, ton lots lb. .92 - .94
North country, No. 3, Ceara, crude, bgs., ton lots lb. .74 - .76
Ceara, refd., pure, bgs., ton lots lb. .83 - .84
Parnahyba, crude, bgs., ton lots lb. .76 - .78
Parnahyba, refd., pure, bgs., ton lots lb. .83 - .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.10 - 1.12
Parnahyba, bgs., ton lots lb. 1.12 - 1.14
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .24½ - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .174 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram, cns kilo.57.60 - —
Liquid in vegetable oil, 500,000 A units per gram, cns kilo.72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. kilo.240.00 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .30 - —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp., inedible, acid-precip. grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .20½ - .21
New Zealand, bgs., c.l., same basis lb. .24 - .24½
Cashewnut shell liquid, treated dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Padang, "A," bls lb. .30 - —
"B," bls. lb. .29 - —
"C," bls. lb. .28 - —
Korintje "A," bls. lb. .29 - —
"B," bls. lb. .28½ - —
"C," bls. lb. .27½ - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor oil, dom., blown, dms., c.l. lb. .2550 - —
dms., l.c.l. lb. .2650 - —
dehydrated, bodied, dms. c.l. lb. .2700 - —
dms., l.c.l. lb. .2850 - —
tanks lb. .2500 - —
Castor oil, dom., dehydrated, unbodied, dms., c.l., lb. .2500 - —
dms., l.c.l. lb. .2660 - —
tanks lb. .2360 - —
hydrogenated, bgs., c.l. lb. .2450 - —
bgs., ton lots lb. .2850 - —
bgs., l.c.l., dlvd lb. .3050 - —
No. 1, dms., c.l. lb. .2150 - —
dms., l.c.l. lb. .2250 - —
tanks lb. .1950 - —
No. 3, tech., dms., c.l. lb. .2125 - —
dms., l.c.l. lb. .2225 - —
tanks lb. .1925 - —
Refd. and deodorized, dms., c.l. lb. .2650 - —
dms., l.c.l. lb. .2750 - —
Castor oil, No. 3, USP, dms., c.l. lb. .2350 - —
dms., l.c.l. lb. .2450 - —
tanks lb. .2150 - —
Imp., No. 1, Brazilian, tanks—lb. .17½ - .17¾
Castor oil, sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms., works lb. .19 - .19¼
Castor oil acids, dehydrated, dms. lb. .44¼ - .46¼
Split, dms. lb. .37¼ - .38¼
Castor pomace, bgs., c.l., works ton.35.00 - —
Castoreum, nat., cns. lb. 5.25 - —
Syn., cns. lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½ - —
Resub., dms., works lb. 4.29½ - —
Catnip leaves, Southern, bls. lb. .65 - .75
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic)
Cedarleaf oil USP XIII cns., dms. lb. 2.85 - 3.10
Cedarwood oil, cns., dms. lb. .51 - .65
Celery seed, French, bgs. lb. .33 - —
Indian, bgs. lb. .19 - —
Cellulose acetate, flake, powd., bgs. ctns., 100-lb. lots or more, dlvd., E. lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 .605
Cellulose acetate-butyrate, 38% butyryl content, bgs., dlvd. E. lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd., E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt. alld lb. .57 - —
bgs. smaller lots, same basis. lb. .59 - —
Cerium chloride, 46%, dms., dlvd lb. .25 - —
Cerium hydrate, 74% CeO fib dms., 100-lb lots or more lb 1.40 - —
77% CeO, fib. dms. 100-lb lots or more lb 1.74 - —

Cerium oxalate (see Rare earth oxalate).			
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd	lb.	1.85 -	1.90
bgs., smaller lots, dlvd	lb.	1.95 -	—
Cetyl alcohol, NF, special, fib. cns., c.l., t.l., dlvd. E	lb.	.48½-	—
fib. cns., l.c.l., same basis	lb.	.50½-	—
tanks, same basis	lb.	.46 -	—
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E	lb.	.41½-	—
fib. cns., l.c.l., same basis	lb.	.43½-	—
tanks, same basis	lb.	.39 -	—
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, bls.	lb.	2.00 -	2.25
Roman, cs.	lb.	1.50 -	—
Chamomile oil, blue Hungarian, bots	lb.	350.00 -	—
Charcoal, activated, NF, fib dms. c.l., works	lb.	.25 -	.32
fib. dms., 5-ton lots, works	lb.	.26½-	.32½
fib. dms., smaller lots, works	lb.	.27 -	.50
Charcoal, black (see Charcoal, activated)			
Charcoal, bone (see Bone black).			
Charcoal, hardwood, lump bulk, c.l., f.o.b. plant	ton.	55.00 -	—
briquets, bulk, c.l., f.o.b. plant	ton.	78.00 -	80.00
5-lb. paper bgs., c.l., same basis	ton.	106.00 -	—
25-lb. paper bgs., c.l., f.o.b. plant	ton.	87.00 -	—
40-lb paper bgs c.l., same basis	ton.	84.00 -	—
Chenopodium oil NF, cns.	lb.	4.15 -	5.00
Chicago acid paste, bbls frt. alld.	lb.	3.21 -	—
Chinawood oil (see Tung oil).			
Chloral, tech 94% min. dms., c.l., works	lb.	.23 -	—
dms., l.c.l., works	lb.	.24 -	—
tanks multiple units, 5 cars, works	lb.	.21 -	—
Chloral hydrate USP jars, 1,000-lb lots	lb.	1.00 -	—
jars, 500-lb lots	lb.	1.03 -	—
jars, 100-lb lots or less	lb.	1.05 -	—
Chlordan, agricultural dms., c.l., frt. alld	lb.	.65 -	—
dms. l.c.l. 5,000 to 10,000-lb. lots, frt alld	lb.	.66 -	—
Chlordan, clarified dms. c.l., frt. alld	lb.	.69 -	—
dms., l.c.l. 5,000-10,000-lb lots, frt. alld	lb.	70 -	—
Chlorinated paraffin, 42%, dms., c.l. frt. alld	lb.	.16¼-	—
dms l.c.l. 10 dms or more, same basis	lb.	.17¼-	—
70%, dms., c.l., same basis	lb.	.18½-	—
dms l.c.l. 10 dms or more, same basis	lb.	.19½-	—
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.60 -	—
ctns., l.c.l., works	lb.	.61 -	—
Chlorinated rubber 125, 1,000 cps., ctns., c.l., works	lb.	.70 -	—
ctns., l.c.l., works	lb.	.71 -	—
Chlorine, liq., cyls., c.l., works, frt equald	lb.	.11 -	—
cyls., l.c.l. Metropolitan area	lb.	.12½-	.13¼
tanks, single units, works, frt. equald 100 lbs.		3.15 -	—
tanks, multiple units, 5 cars, works, frt equald 100 lbs.		4.05 -	—
tanks, multiple units 4 cars, same basis 100 lbs.		4.25 -	—
tanks, multiple units, 2 cars, same basis 100 lbs.		5.25 -	5.75
tanks, multiple units, 1 car, same basis 100 lbs.		6.25 -	7.25
Chloroacetic acid, mono, flake, 99%, dms c.l	lb.	.23½-	.25½
dms. l.c.l	lb.	.24½-	—
tech flake, 96-97% dms., c.l., frt. equald	lb.	.19 -	—
dms., l.c.l., frt. equald	lb.	.20 -	—
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld	lb.	1.03 -	—
4-Chloro-2-aminotoluene, fused, bbls.	lb.	1.38 -	—
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld	lb.	.66 -	—
m-Chloroaniline, dms., c.l., frt. alld.	lb.	.75 -	—
dms., l.c.l., same basis	lb.	.77 -	—
tanks, same basis	lb.	.73 -	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52 -	—
dms., l.c.l., same basis	lb.	.54 -	—
tanks, same basis	lb.	.50 -	—
p-Chloroaniline, dms., c.l., frt. alld.	lb.	.77 -	—
dms., l.c.l., same basis	lb.	.79 -	—
o-Chlorobenzaldehyde, dms., t.l., works, dlvd to N.Y. Metropolitan area	lb.	1.05 -	—
dms., t.t.l., same basis	lb.	1.20 -	—
p-Chlorobenzaldehyde, dms., t.c.l., works, dlvd to N. Y. Metropolitan area	lb.	1.95 -	—
o-Chlorobenzoic acid, fib. dms., t.l., works	lb.	1.10 -	—
fib. dms., smaller lots, works	lb.	1.25 -	—
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works.	lb.	2.25 -	—
fib. dms., less than 2,000-lbs., same basis	lb.	2.30 -	—
Chloroform, tech., dms., c.l., dlvd. E	lb.	.18 -	—
dms., l.c.l., same basis	lb.	.19 -	—
tanks, same basis	lb.	.17 -	—
USP, dms., c.l., dlvd	lb.	.27 -	—
dms., l.c.l., dlvd	lb.	.30 -	—
tanks, minimum 4,000 gals., dlvd.	lb.	.25 -	—
2-Chloro-4-nitroaniline, paste, dlvd. E, 100% basis	lb.	.81 -	—
Powd. dlvd. E. 100% basis	lb.	.86½-	—
4-Chloro-2-nitroaniline, powd., dlvd. E	lb.	.80½-	—
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld	lb.	.75 -	—
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.99 -	—
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.17 -	—
o-Chlorophenol, dms., c.l., frt. equald	lb.	.37 -	—
dms., l.c.l., same basis	lb.	.38 -	—
p-Chlorophenol, dms., c.l., frt. equald	lb.	.37 -	—
dms., l.c.l., same basis	lb.	.38 -	—
Chloropicrin, comi., cyls., 130 lbs., frt. alld	lb.	1.07 -	—
cyls., 100 lbs. same basis	lb.	1.08 -	—
cyls., 50 lbs., same basis	lb.	1.14 -	—
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465-	—
dms., l.c.l., frt. equald	lb.	.0515-	—
tanks, frt. equald	lb.	.0415-	—
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher			
o-Chlorotoluene, tech., dms., t.l., works	lb.	.37 -	—
dms., l.c.l., l.t.l., same basis	lb.	.38 -	—
Choline bitartrate, fib dms., frt. adjusted	kilo.	2.75 -	3.00
Choline chloride fib. dms., frt. adjusted	kilo.	2.75 -	3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted	kilo.	2.75 -	3.00
Chrome green, CP, dark, lgnt medium blue content 1-15%, bbls., dlvd. E. of Rockies	lb.	.40 -	.42
blue content 16-30%, bbls., same basis	lb.	.40 -	.42
blue content 31-45%, bbls., same basis	lb.	.41 -	.43
Chrome green, CP, dark, light, medium, blue content 45-49%, bbls., same basis	lb.	.44 -	.46
Reduced color, 25%	lb.	.19 -	.20
Chrome green prices 1c. higher W. of Rockies.			
Chrome orange, CP, bbls., dlvd. E. of Rockies	lb.	.31½-	—
Chrome orange prices 1c. higher W. of Rockies.			
Chrome yellow, CP, bbls., dlvd. E. of Rockies	lb.	.31½-	—
Chrome yellow price 1c. higher W. of Rockies.			
Chromic acid, 99¾%, dms., c.l., works, frt. equald	lb.	.29½-	—
dms., l.c.l., dlvd. N. Y. Metropolitan area	lb.	.30 -	.31
Chromic acid, NF (see Chromium trioxide).			
Chromium acetate, soln., 7½%, NF, yellow broken, bgs.	lb.	.35 -	.40
dms., 500-2,000-lb. lots, works.	lb.	.10 -	—
Chromium oxide, hydrated, bbls., fib dms., c.l., frt. alld	lb.	1.20 -	—
Pure, bgs., c.l., frt. alld	lb.	.44½-	—
bgs., l.c.l., same basis	lb.	.45¼-	—
Chromium trioxide, NF, bots	lb.	1.15 -	—
Cinchona bark, NF, red, broken, bgs	lb.	.25 -	—
Chromium fluoride, bbls., works	lb.	.51 -	.52
Cinnamic acid refd, bots.	lb.	2.50 -	3.50
Cinnamic alcohol, bots	lb.	1.90 -	2.20
Cinnamic aldehyde, dms	lb.	.92 -	1.25
Cinnamon, Ceylon, No. 2, bgs	lb.	.72 -	—
Ceylon No. "0000" bgs.	lb.	.85 -	—
Cinnamon bark oil, bots	lb.	36.00 -	70.00
Cinnamon leaf oil, crude, dms	lb.	1.35 -	2.00
USP (Cassia), cns., dms	lb.	8.50 -	13.50
Citral, CP, bots	lb.	3.15 -	3.25
Extra, bots.	lb.	3.45 -	5.05
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l	lb.	.29½-	.30
bgs., dms., 10,000-lb lots, 1 shipt	lb.	.30 -	.30½
bgs., dms., smaller lots	lb.	.30½-	.31
Citric acid, USP, hydrous, fine gran. bgs., dms., c.l	lb.	.27½-	.28
bgs., dms., 10,000-lb. lots, 1 shipt	lb.	.28 -	.28½
bgs., dms., smaller lots	lb.	.29 -	.29½
Powdered citric acid ½c. per lb. higher.			
Citronella oil, Ceylon, dms	lb.	.54 -	.80
Java-type, dms.	lb.	.60 -	.95
Citronellol, bots., dms	lb.	2.30	3.30
Civet, artif., bots.	lb.	13.75	15.00
Nat., bots.	oz.	8.50	15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.	17.50	21.50
crushed, shed moisture, bulk, c.l. Tenn ton		8.00	11.00
Clay, ball, imp., airfloated, bgs, c.l., Atl. port	net-ton.	42.00	45.75
lump, bulk, Atl. port	net-ton.	29.50	35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works.	ton.	10.00	12.00
Georgia, bgs., l.c.l. works.	ton.	15.50	—
Clay, China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works	ton.	13.50	14.50
bgs., l.c.l., ex-whse	ton.	35.00	36.00
Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long-ton.		20.00	35.00
powd., bgs., c.l., ex dock, net-ton.		50.00	—
bgs. l.c.l. ex whse net-ton		60.00	70.00
Cleaner's naphtha, petroleum 140°F, flash, tanks, east coast, New Jersey and New York	gal.	18	—
tanks, group 3	gal.	15 -	15½
tanks, Houston, Tex.	gal.	19 -	—
tankwagon, Newark	gal.	19 -	—
New York	gal.	19 -	—
Philadelphia	gal.	19½-	—
Cleve's acid, tech., mixed, solid, dms., frt. alld	lb.	1.05 -	—
Cleve's acid, 1,6, tech. solid, dms., frt. alld	lb.	.77 -	—
1,7, tech., dms., frt. alld.	lb.	2.20 -	—
Cloves, Madagascar, bgs	lb.	.39 -	—
Zanzibar, bgs.	lb.	.46 -	—
Clove bud oil, USP, dms	lb.	2.70 -	3.60
Clove leaf oil, crude, dms.	lb.	1.38 -	2.10
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd E., 100% basis	lb.	.41½-	—
96.4% low, or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis	lb.	.43½-	—
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis	lb.	.41½-	—
bgs. or fib. dms. l.c.l., dlvd. E., 100% basis	lb.	.43½-	—



It's an enteric coating



and it works

Here is a straight-line approach to the problem of enteric coatings. It does not force you to trust that the human intestine always maintains a certain definite pH. Nor does it put you in the position of assuming that everybody's stomach empties at the same rate of speed.

This coating is made with *Eastman C-A-P Cellulose Acetate Phthalate*. It stubbornly resists the action of gastric juices and erosion from stomach motion. It disintegrates promptly and completely in the small intestine in response to the hydrolytic action of the intestinal esterases. This is unique.

Eastman C-A-P makes smooth, glossy, continuous coatings that dry quickly without pinholes and resist abrasion in tumbling. It is compatible with plasticizers that enhance coating continuity; soluble in many organic solvents. More than a billion doses have been coated with it.

Perhaps this radically different enteric could help you improve a medicament now in production. Maybe the fact that it is available without patent license* puts a new light on products you'd like to reactivate, or new ones you'd like to launch. For data, prices, and help in coating problems, write ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

**Except in France.*

"Eastman" and "C-A-P" are trademarks

DPi

Also ... vitamins A and E ... distilled monoglycerides ... some 3700 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

CMC—Diethylene Glycol Monobutyl Ether Acetate

CMC, purif. high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs. smaller lots same basis, lb. .59 - —
CMC prices W of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Coaltar, refd. resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks works gal. .20½-
Coaltar pitch aluminum, bulk, works ton 44.00 —
Carbon and indust. bulk, works ton 44.00 —
Coaltar pitch, core, bulk, works ton.40.50 - —
Fiber bulk, works ton.48.00 —
Roofing, 140-155°F. Federal Specification RP-381 Type 1, tanks, works ton 41.00 - —
Cobalt acetate 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue genuine 250 lb. bbls., dlvd E. of Rockies lb 4.90 - —
Cobalt blue prices 1c higher W. of Rockies
Cobalt blue imitation (see Ultramarine blue).
Cobalt carbonate, 46% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq. 6% Co. dms. lb. .57½- —
Cobalt metal, 97-99% dms. f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co bbls. dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., dlvd. E. of Rockies lb. 1.33 - —
70-71% Co., kgs same basis lb. 1.29 - —
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate fused 3% Co. dms. lb. 29½- —
Cobalt sulfate, cryst. 21% Co. dms., dlvd lb. .64 - —
Cobalt sulfate, monohydrated, 33% Co. dms., dlvd lb. 1.09 - —
Cobalt tallate 6% Co. dms., dlvd. lb. 44 - —
Cocaine, USP, cns., 100-oz lots oz.17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz.13 75 - —
Cocillana bark, bls lb. .20 - .22
Cocoa butter, bgs. lb. .72 - .77
Coconut oil, crude, tanks, New York lb. .21¾- .22
tanks, Pac. coast lb. .20 - —
Refd., deodorized, dms. lb. .28 - .29
Coconut oil acids, dist., dms lb. .30½- .33
tanks lb. .28 - —
double dist. (stripped), dms. lb. .31½- .34
tanks lb. .29 - —
Cod oil, dms., spot lb. .09 - .09¼
Codeine, NF, cns., 100-oz lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11 75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP cns., 100-oz. lots oz.10 75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls. lb 20 - 22
Blue, bls. lb 20 - 22
Colchicine, USP, bots oz.27.00 - —
Colchicum root, bls lb. .30 - .35
Colchicum seed, bgs lb. .60 - .65
Collodion, USP, dms. lb. .32½- —
Flexible, dms lb. .34 - —
Colocynth pulp, bls lb. .50 - .55
Colombo root, bls lb. .16 - .18
Condurango bark, bls. lb. .26 - —
Congo copal gum, No. 1, bgs lb. .25 - .26
No. 2 bgs lb. .22 - .24
No. 3, bgs. lb. .16½- .19
Copaiba balsam, cns., dms lb. .65 - —
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3485- —
bgs., l.c.l., works lb. .3635- —
Copper chloride, cupric, anhyd., dms., works lb. .44¾- .45¼
Cryst., dihydrate dms., works, lb. .30½- .31
Cryst., dried, dms., works lb. .38¾- .39¼
Copper chloride cuprous, dms., works lb. .4030- .4330
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .659
Copper gluconate, dms. lb. 3.20 —
Copper hydrate dms., c.l., frt. alld. E. of Miss lb. .51¾- —
dms., l.c.l., same basis lo. .52¼- —
Copper metal, electrolytic, dlvd. Valley basis lb. .31½- —
Copper naphthenate liq., 8% Cu, dms., frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾- .32¼
Copper oleate, solid 9% Cu, dms., works lb. .45 —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47¾- —
Copper oxide, red, 97% USN Type I, bbls., 100-5,000-lb lots lb. .48½- —
90% USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .46½- —
Copper quinolinolate 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 1.15
Copper resinate, precip, dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1920- —
Cryst., 99%, bgs. c.l., works. 100 lbs.12.30 - —
bgs., l.c.l., works 100 lbs.12.80 -15.30
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.23.05 - —
dms., l.c.l., works 100 lbs.23.80 - —
Copper sulfate, tribasic distributors, bgs., c.l., works 100 lbs.28.15 - —
bgs., l.c.l., works 100 lbs.29.15 -32.15
Copper undecylenate dms. lb 2 75 —
Copra, Atl., Gulf ports, c.i.f lb.262.50 - —
Pac. ports, c.i.f. lb.257.50 - —
Coriander oil, USP, bots. lb. 9.25 -11.50
Coriander seed, Moroccan, bgs lb. .03 - —
Rumanian, bgs. lb. .07½- —
Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .12¾- —
Foots (soapstock) acid 95%, tanks, New York lb. .06¾- —
Refd., salad, dms. lb. .1848- .1875
tanks lb. .1648- —
Corn oil acids, dist., dms. lb. .16¾- .19¼
tanks lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.31 - —
non-ret dms., l.c.l 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP kilo or more gram. 1.90 - 2.00
Costus oil, bots oz 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton.62.00 - —
Cottonseed oil, crude, tanks, South, East lb. .12¾ Nom.
tanks, Valley lb. .12⅝- —
tanks, Texas, Lubbock lb. .12¼ Nom.
tanks, Texas, Waco lb. .12⅜- —
Foots (soapstock), acid 95%, tanks, New York lb. .05 - —
Refd., salad, dms. lb. .18¼- .18⅜
tanks lb. .16⅛- —
Cottonseed oil acids, dist., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Coumarin NF cryst., dms. lb 3.60 3.70
Cramp bark, NF, bls lb. .85 .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
crude, soln 80%, tanks, works gal. .226 - —
Creosote, coaltar, refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote oil (see Creosote coaltar).
Creosote, beechwood, cbys., dms., f.o.b., works, dlvd. in Metropolitan area lb. 1.72 1.77
Hardwood, NF, cbys dms., same basis lb. 1.42 1.47
Pinewood, dms., incl., c.l., works lb. .0561- —
dms incl., l.c.l., works lb. .0634- —
dms. incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms. c.l., works. lb. .60 - —
dms., l.c.l. works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald. lb .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28.9°C. m.p., dms., c.l., frt. equald. lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd. lb. .53 - —
tanks, dlvd lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. 72 - —
p-Cresyl methyl ether, cns. lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald. gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis. gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., works lb. .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
bgs., l.c.l., works 100 lbs.14.25 - —
Cube root powd., 5% rotenone, bgs., c.l., t.l., works lb. .25 - —
Cubeb berries, NF, bgs. lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns. lb.12.00 -16.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .30 - —
Moroccan, bgs. lb. .31 - —
Turkish, bgs. lb. .28 - —
Cumin seed oil, bots., cns. lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran. bgs., Niagara Falls, Ont., contract ton.57.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.85 - —
Cyanamide, indust. grade, bgs., c.l., works ton.75.00 - —
bgs., l.c.l., works ton.96.00 - —
Indust. grade, 6-16 mesh, dms., c.l. works ton.120.00 - —
dms., l.c.l., works ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies gal. 1.02 - —
dms., l.c.l., same basis gal. 1.10 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. W. of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt alld E lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl.48.00 - —
6-oz cyls., works cyl.12.00 - —
Cyclopropane, USP, hospitals, cyls., 40-gal. lots gal. .42 - —
cyls., 100-gal lots gal. .41 - —
cyls., 200-gal. lots gal. .40 - —
Cypress oil, bots. lb. 5.30 - —

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia A/E, cs lb. No stocks.
East India, Batu, bold, bgs. lb. .14¼- .16½
nubs and chips bgs lb. .08½- .09½
black, bold, bgs lb. .14½- .16½
nubs and chips, bgs lb. .12¼- .13½
unscraped, bgs. lb. .13 - .14½
pale, chips, bgs lb. .14½- .16
nubs and chips, bgs lb. .09 - .10
Siam, cs. lb. .30 - .33
Singapore No. 1, bgs lb. .36 - .41
No. 2, bgs lb. .29 - .32
No. 3, bgs lb. No stocks.
dust, bgs. lb. .17 - .19
Dandelion root, bls. lb. .28 - .32
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib dms., l.c.l. works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots same basis. lb. .25 - —
fib. dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd. E. lb. .41½- —
dms., l.c.l., dlvd. E. lb. .43½- —
tanks, dlvd. E. lb. .39 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .21 - —
Perfume grade, bots lb. 1.75 - 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton.51.00 - —
18% P, paper bgs., c.l., works, ton.63.50 -69.12
19% P, paper bgs. works, Houston, Tex., c.l., t.l ton 71.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common, bbls lb. .10 - .12
Neutral, bbls. lb. .21 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, dlvd., same basis gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd, E. of Rockies gal. .72 - —
dms., l.c.l., same basis gal. .77 - .83
tanks, same basis gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd E. of Rockies gal. .69 - —
dms., l.c.l., same basis gal. .74 - .80
tanks, same basis gal. .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
SD23A, dms., l.c.l., dlvd. E of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb.15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 - —
paper bgs., l.c.l 100 lbs. 9.53 - —
Dextrin, corn, canary dark, paper bgs., c.l 100 lbs. 9.22 - —
paper bgs., l.c.l 100 lbs. 9.37 - —
Dextrin, corn, indust. grade, 6-16 mesh, dms., canary light, paper bgs., c.l 100 lbs. 9.12 - —
paper bgs., l.c.l 100 lbs. 9.27 - —
white, paper bgs., c.l 100 lbs. 8.96 - —
paper bgs., l.c.l 100 lbs. 9.11 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Dextrose, anhyd., coml., bgs., c.l., ex whse 100 lbs. 8.50 - —
bgs., l.c.l., ex whse 100 lbs. 8.65 - —
Hydrated, coml., bgs., c.l., ex whse 100 lbs. 7.30 - —
bgs., l.c.l., ex whse 100 lbs. 7.45 - —
Anhyd., special, al. foil lined fib. dms., 200-lb. dms 100 lbs.14.70 - —
100-lb. dms 100 lbs.15.20 - —
USP, dms. lb .19¾- —
Diacetyl, flavor grade, bots lb. 4.30 - 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Diacetone alcohol, tech., dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
Diallylamine, dms., c.l., dlvd lb. .98½- —
dms., l.c.l., dlvd lb. 1.00 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms. c.l., works. lb. .93 - —
dms., l.c.l. same basis lb. .94 - —
tanks, same basis lb. .91 - —
p-Dibromobenzene, bgs., 500-lb lots, lb. .55 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., l.t.l., dlvd lb. 1.10 - —
2,6-Di-tert-butyl-p-cresol, feed grade, to pre-mix distributors, dms., c.l., t.l., dlvd lb. .87½- —
dms., l.c.l., same basis lb. .91 - —
2,6-Di-tert-butyl-p-cresol, tech., dms., c.l., t.l., dlvd lb. .81 - —
dms., l.c.l., same basis lb. .85 - —
tanks, same basis lb. 79 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms. c.l. dvd E. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms. c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28 - —
dms., l.c.l., dlvd lb. .29½- —
tanks, dlvd. lb. .24½- —
Dicapryl sebacate, dms. c.l. works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. 61 - —
Dichlorophenoxyacetic acid (see 2,4-D)
2,5-Dichloroaniline, dms. works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l. same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms., 2,000 lbs. or more same basis, lb. .14½- —
1,4,-Dichlorobutane, dms. c.l. or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks works lb. .03 - —
Dicyclohexylamine dms. c.l. works. lb. .54 - —
dms., l.c.l. works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Didecyl phthalate, dms. c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
Didecyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., lb. .26 - —
Dieldrin, dms. dlvd lb. 1.85 - —
dms., l.c.l., dlvd lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd E. lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld lb. .28½- —
tanks, frt. alld lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethylbenzene, dms. t.l., frt. alld. lb. .16½- —
dms., l.t.l., same basis lb. .18½- —
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd lb. .29 - —
Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 - —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works lb. 2.30 - —
5-44 dm lots, works lb. 2.35 - —
1-4 dm lots, works lb. 2.40 - —
Diethylamine, dms., c.l., dlvd. E lb. .52 - —
dms., l.c.l. same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate)
Diethylene glycol, dms., c.l., dlvd. E lb. .17¾- —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51¼- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .31¾- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E lb. .28¾- —

Diethylene glycol monoethyl ether, dms., c.l., dlvd.	lb.	.22¼-	—
dms., l.c.l., dlvd	lb.	.23½-	—
tanks, dlvd. E	lb.	.20 -	—
Diethylene glycol monoethyl ether acetate, dms., c.l., works	lb.	.27¼-	—
dms., l.c.l., works	lb.	.28 -	—
tanks, works	lb.	.25¼-	—
Diethylene glycol monomethyl ether, dms., c.l., dlvd	lb.	.21 -	—
dms., l.c.l., dlvd	lb.	.22 -	—
tanks, dlvd. E	lb.	.18½-	—
Diethylenetriamine, dms., c.l., dlvd. E	lb.	.44 -	—
dms., l.c.l., dlvd. E	lb.	.45½-	—
tanks, dlvd. E	lb.	.41½-	—
Diethylstilbestrol, USP, bots, 10-kilo lots	kilo.	100.00	-147.50
bots., 1-kilo lot	kilo.	110.00	-152.50
Digitalis leaves, USP, dom., dms	lb.	1.20 -	—
Digitoxin, USP, bots	gram.	4.75 -	—
Diglycol laurate, dms	lb.	.32¾-	.34
Diglycol stearate, dms., ton lots	lb.	.26 -	.28
Diglycolic acid, bgs., c.l., t.l., works.	lb.	.15½-	—
bgs., l.c.l., works	lb.	.16 -	—
Dihexyl sebacate, dms., c.l., works.	lb.	.66 -	—
dms., l.c.l., works	lb.	.67 -	—
tanks, works	lb.	.64 -	—
Dihydrazine sulfate, dms., works	lb.	1.10 -	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.037 -	.038
Dihydrostreptomycin sulfate, bulk, gram	lb.	.037 -	.038
1,2-Dihydroxy anthraquinone, dms., works	lb.	3.45 -	—
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms	lb.	2.55 -	—
tech., dms.	lb.	1.09 -	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17 -	—
dms., l.c.l., dlvd	lb.	.18½-	—
tanks, dlvd.	lb.	.14½-	—
Di-isobutyl phthalate, dms., c.l., dlvd. E	lb.	.31½-	—
dms., l.c.l., same basis	lb.	.32½-	—
tanks same basis	lb.	.29 -	—
Di-isobutylene, dms., c.l., dlvd. E.	lb.	.10 -	—
dms., l.c.l., dlvd. E	lb.	.11½-	—
tanks, dlvd. E	lb.	.08 -	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals.,	lb.	.25 -	—
Di-iso-octyl sebacate, dms., c.l., works.	lb.	.62 -	—
dms., l.c.l., works	lb.	.62½-	.63
tanks, works	lb.	.60 -	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼-	—
dms., l.c.l., same basis	lb.	.24¾-	—
tanks, same basis	lb.	.20¾-	—
Di-isopropylamine dms., c.l., dlvd. E of Rockies	lb.	.50½-	—
dms., l.c.l., same basis	lb.	.52 -	—
tanks, same basis	lb.	.48 -	—
Dillweed oil, dom., bots., dms	lb.	3.10 -	4.10
Dimethyl anthranilate, cns.	lb.	4.35 -	—
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd	lb.	1.225 -	—
dms., l.c.l., dlvd.	lb.	1.235 -	—
tanks, dlvd.	lb.	1.20 -	—
70% dms. c.l., dlvd., 100% basis, contained amines	lb.	.68½-	—
dms., l.c.l., dlvd., 100% basis.	lb.	.69½-	—
tanks, dlvd., 100% basis	lb.	.66 -	—
Dimethyl hydroquinone, dms.	lb.	1.90 -	2.20
Dimethyl phthalate, dms., c.l., works.	lb.	.27½-	—
dms., l.c.l., works	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25	—
Dimethyl sebacate, dms., c.l., works.	lb.	1.31 -	—
dms., l.c.l., works	lb.	1.30 -	—
tanks, works	lb.	1.28 -	—
Dimethyl sulfate, ret. dms., c.l., works.	lb.	.17½-	—
ret. dms., l.c.l., works	lb.	.18½-	—
tanks, works	lb.	.16½-	—
Dimethyl sulfide, dms., c.l., works.	lb.	.16½-	—
dms., l.c.l., works	lb.	.17 -	—
tanks, works	lb.	.15 -	—
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis.	lb.	.38 -	—
dms., l.c.l., frt. equald, 100% basis	lb.	.38½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
40% soln., dms., c.l., frt. equald., 100% basis	lb.	.35 -	—
dms., l.c.l., frt. equald., 100% basis	lb.	.35½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
N,N-Dimethylaniline, dms., c.l., frt. alld.	lb.	.30 -	—
dms., l.c.l., frt. alld.	lb.	.31 -	—
tanks, frt. alld.	lb.	.28 -	—
N,N-Dimethylformamide, dms., works.	lb.	.34 -	.39
tanks, works	lb.	.32 -	—
2,4-Dinitroaniline, dms., frt. alld.	lb.	.75 -	—
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies	lb.	1.56 -	—
Dinitroaniline orange toner prices 1c. higher W. of Rockies.			
m-Dinitrobenzene, 85°C., dms.	lb.	.22 -	—
89° C., dms.	lb.	.24 -	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E	lb.	.15¼-	—
dms., l.c.l., frt. alld. E.	lb.	.15¾-	—
tanks, frt. alld. E.	lb.	.15 -	—
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E.	lb.	.20¼-	—
dms., l.c.l., frt. alld. E.	lb.	.20¾-	—
tanks, frt. alld. E.	lb.	.20 -	—
2,4-Dinitrophenol, bbls.	lb.	.37 -	—
2,4-Dinitrotoluene, oily, dms.	lb.	.11 -	—
Refd., 63°C., dms.	lb.	.23 -	—
Dioctyl adipate, dms., c.l., works.	lb.	.42½-	—
dms., l.c.l. works	lb.	.43½-	—
tanks, works	lb.	.40 -	—
Dioctyl phthalate, dms., c.l., frt. alld.	lb.	.27½-	—
dms., l.c.l., frt. alld	lb.	.29 -	—
Dioctyl phthalate, tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25	—
Dioctyl sebacate, dms., c.l., works.	lb.	.61¼-	—
dms., l.c.l., works	lb.	.62¼-	—
tanks, works, dlvd.	lb.	.59¼-	—
1,4-Dioxane, dms., c.l. works	lb.	.30 -	—
dms., l.c.l., works	lb.	.30¾-	—
tanks, works	lb.	.28 -	—
Dipentaerythritol, c.l., t.l., dlvd. E.	lb.	.40 -	—
bgs., l.c.l., l.t.l., dlvd. E	lb.	.41 -	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.59 -	—
dms., l.c.l., works	gal.	.63 -	—
dms., l.c.l., ex whse.	gal.	.79 -	—
tankcars, works	gal.	.42 -	—
Dipentene, steam dist., dms., c.l., works, South	gal.	.72 -	—
dms., l.c.l., dlvd. New York	gal.	.91 -	—
tanks, works, South	gal.	.55 -	—
Dip oil (see Tar acid oil)			
Diphenyl, bgs., c.l., t.l., works	lb.	.17¼-	—
bgs., l.c.l., works	lb.	.19 -	—
tanks, works	lb.	.16 -	—
Diphenyl oxide, perfume grade, cns.	lb.	.85 -	.85
Diphenyl phthalate, dms., c.l., works.	lb.	.51¼-	—
dms., l.c.l., works	lb.	.53¾-	—
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.31 -	—
bgs., l.c.l., same basis	lb.	.33 -	—
Diphenylamine, refd., fused, tanks, same basis	lb.	.28 -	—
Refd. diphenylamine in dms. ½c. per lb. higher.			
Diphenylguanidine, bgs., dms., ton, lots, frt. alld.	lb.	.49 -	—
bgs., smaller lots, frt. alld.	lb.	.50 -	—
Diphenylhydantoin-sodium, USP, dms.	lb.	5.00 -	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17¾-	—
dms., l.c.l., frt. alld.	lb.	.18¾-	—
tanks, frt. alld.	lb.	.15¼-	—
Dipropylene glycol methyl ether, dms., c.l., dlvd. E	lb.	.20 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.18½-	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.45 -	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.69 -	—
dms., smaller lots, frt. alld.	lb.	.70 -	—
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld	lb.	.55 -	—
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald	lb.	.20 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.19 -	—
50-60%, dms., c.l., works, 100% basis	lb.	1.00 -	—
dms., l.c.l., works, 100% basis.	lb.	1.05 -	—
Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald	lb.	.134 -	—
dms., l.c.l., same basis	lb.	.144 -	—
tanks, same basis	lb.	.114 -	—

Diethylene Glycol Monoethyl Ether—Dyes, Coaltar

Dodecylphenol, c.l., frt. alld.	lb.	.22 -	—
dms., l.c.l., same basis	lb.	.23 -	—
tanks, same basis	lb.	.19½-	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:			
Blue, FD&C, No. 1	lb.	15.65	-17.60
No. 2	lb.	15.65	-17.60
Green, FD&C, No 1	lb.	15.65	-17.60
No. 2	lb.	19.60	-22.85
No. 3	lb.	31.30	-35.90
Red, FD&C, No. 1, cns.	lb	5.90	7.85
No. 2	lb	3.30	4.10
No. 3	lb	19.60	-22.85
No. 4	lb	5.55	7.50
Violet, FD&C, No. 1, cns.	lb	15.65	-17.60
Yellow, FD&C, No. 1, cns.	lb.	9.15	-11.05
No. 5	lb.	3.30	4.10
No. 6	lb.	3.30	4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—			
Black, D&C, No. 1	lb	10.50	-10.95
Brown, D&C, No. 1	lb	15.65	-16.10
Green, D&C, No. 5	lb	15.65	-16.10
No. 6	lb	15.65	-16.10
No. 7	lb	14.35	-14.80
Orange, D&C, No. 3	lb	10.50	-10.95
No. 4	lb	19.60	-20.05
No. 5	lb	3.80	4.25
Red, D&C, No 17	lb	10.50	-10.95
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—			
No. 18	lb	23 60	24 00
No. 19	lb	15 00	15 45
No. 21	lb	3 90	4.35
No. 22	lb	10 50	10 95
No. 28	lb	24.15	24 65
No. 33	lb.	17 00	17 45
Violet, D&C, No. 2	lb.	15.65	16 10
Yellow, D&C, No. 7	lb.	10.50	10 95
No. 8	lb	10.50	10 95
No. 10	lb.	13 05	13.50
No. 11	lb.	13.05	13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—			
Blue, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Green, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Red, Ext., D&C, No. 1, cns	lb	13.05	-13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	-10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd. No.			
11110 Brilliant scarlet BN	lb.	1.70	- —
13390 Fast blue SR	lb.	1.30	- —
14025 Yellow 2G	lb.	1.18	- —
14030 Orange R, extra, conc.	lb.	1.52	- —
14645 Chrome black T	lb.	.73	- —
14720 Rubine XX, conc.	lb.	1.47	- —
15510 Orange Y, extra conc.	lb.	.79	- —
15575 Orange RR	lb.	.94	- —
15620 Fast Red A, conc.	lb.	1.53	- —

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

D.E.T. — Diethyl Toluamide
(95% Meta Isomer)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No

15705 Chrome blue black R, conc. lb 1.07 - —
16150 Scarlet 2RL lb. 1.16 - —
16230 Fast light, orange 2G lb. 1.29 - —
16255 Brilliant scarlet 3RN, conc. lb 1.20 —
17590 Brown PG lb. 3.00 - —
17820 Diazo brilliant scarlet ROAD lb 3.62 —
18050 Phloxine 2G lb. 1.05 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast Yellow 2G lb 2.52 - —
19140 Yellow XX lb. 2.30 - —
19555 Yellow NN, conc lb. 3.67 - —
20170 Brown Y lb. 1.27 - —
20470 Blue black, extra, conc lb 1.37 - —
21010 Brown, RX, conc lb. 1.35 - —
22240 Scarlet B lb. 2.60 - —
22310 Red FC lb. 1.45 - —
22311 Brown MCW lb. 1.40 - —
22590 Diazo black BHD lb. .93 - —
22810 Blue 2B, extra conc. lb. 1.53 - —
23500 Red, 4BX conc lb. 1.69 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow conc. lb. 3.11 - —
26400 Navy blue 3R, conc. lb. 1.70 - —
26695 Black F, conc. lb. 2.19 - —
26900 Milling Red 3R, conc. lb. 1.91 - —
27075 Neutral black 2B, conc lb. 2.61 - —
27720 Gray L lb. 2.08 - —
29185 Fast scarlet 4BNC lb 2.12 - —
30015 Diazo black VJ conc. lb. 2.48 - —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No

30235 Black EB, 200% lb. 1.33 - —
30045 Yellow brown K, extra lb. 1.26 - —
30295 Green BY, conc lb. 1.02 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb. 1.76 - —
40000 Yellow 2G lb. 1.31 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V, crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B, conc. lb. 4.78 - —
42650 Violet 4BXN lb. 2.25 - —
43820 Brilliant blue BBG lb. 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.22 - —
53185 Black, GXCF, conc. lb. .38 - —
58005 Alizarin red SC lb. 3.31 - —
59700 Golden orange GFD single paste lb 2.58 - —
59710 Flaming orange 6RD double powder lb. 4.70 - —
59800 Dark blue BO, single paste lb 2.28 - —
59825 Jade green NC supra, double paste lb 1.55 - —
61570 Alizarin green CG extra lb. 3.53 - —
63010 Alizarin blue SAPG lb. 3.78 - —
63615 Alizarin blue black B lb. 3.02 - —
69825 Blue BLFD double paste lb. 2.82 - —
70800 Brown BR single paste lb. 2.03 - —

Dyes, coaltar, oil-soluble, 100-lb. drums dlvd. No.

12140 Oil scarlet BL lb. 1.70 - —
11160 Oil yellow T lb. 2.79 - —
12055 Oil orange 7078-V lb. 5.87 - —
26120 Oil red N-1700 lb. 1.76 - —
42535B Methyl violet base lb. 1.76 - —
44045B Victoria blue base lb. 4.06 - —
50415B Oil black 8603 lb. .80 - —
61565 Alizarin cyanine green base. lb. 6.13 - —

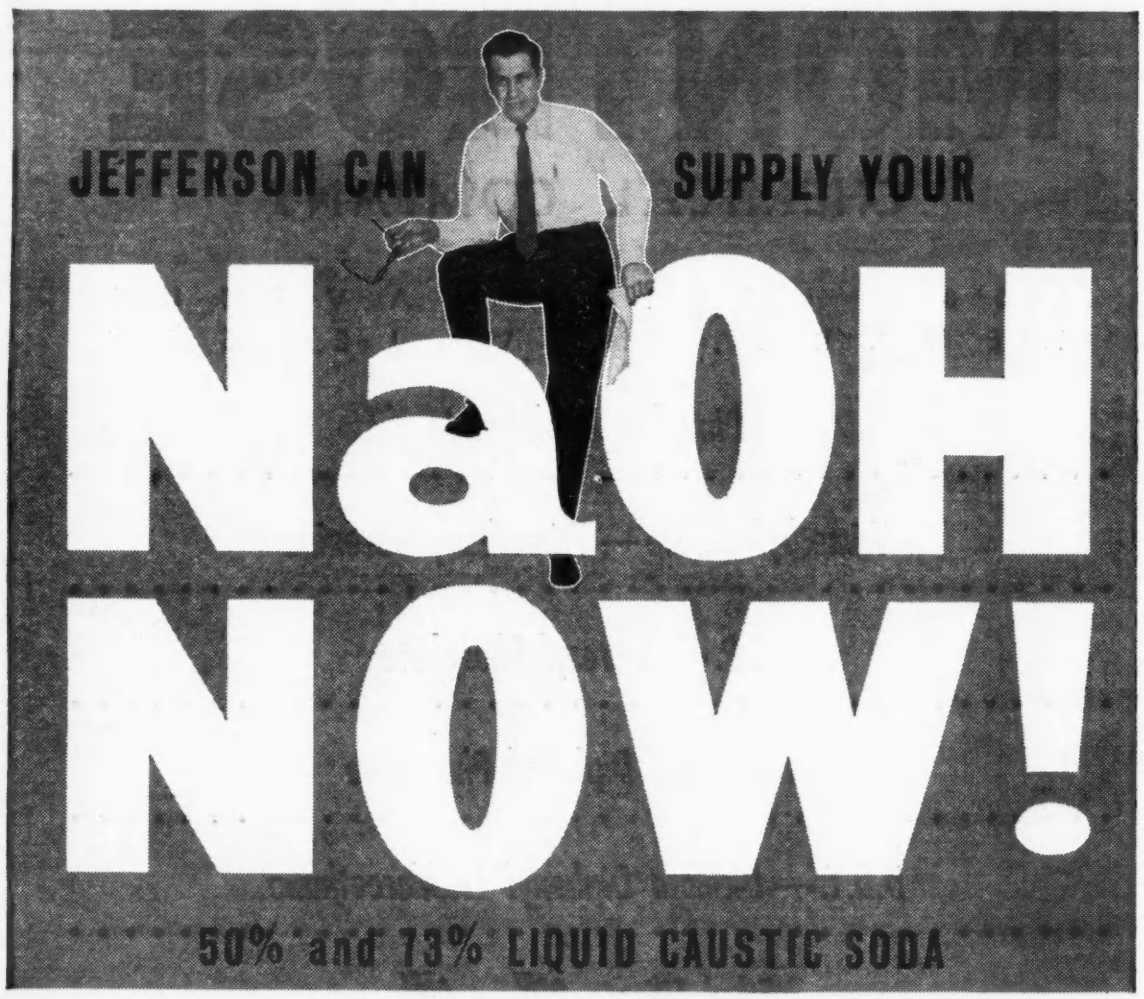
Dyes, coaltar, spirit soluble, 100-lb. dms., dlvd. No.

Spirit black RB lb. 3.54 - —
Spirit brown GN lb. 5.30 - —
Spirit orange R conc. lb. 5.87 - —
Spirit red B conc lb. 6.41 - —
Spirit yellow 2R conc. lb. 4.62 - —
12055 Spirit orange 7078-V lb. 1.25 - —
Spirit blue THN lb. 5.06 - —

E

Echinacea root, bls lb. 1.10 - —
Elm bark, grinding, bls. lb. .30 - .32
Powd., bbls., bxs. lb. .45 - —
Select bundles lb. .75 - —
Emetine hydrochloride, USP, bots. oz. 48.40 - —
Endrin, tech., dms., t.l., dlvd lb. 3.35 - —
Eosin red toner, bbls., works lb. 1.85 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots oz. .98 - 1.00
hydrous bots 100-oz. lots oz. .92 - —
Ephedrine hydrochloride, NF, dms., oz. .60 - .65
Ephedrine sulfate, USP, cryst., dms., oz. .60 - .80
Powd., dms. oz. .60 - .80
Epichlorohydrin, dms., c.l., dlvd lb. .32½- —
dms., l.c.l., dlvd lb. .34 - —
tanks, dlvd. lb. .30 - —

Epsom salt (see Magnesium sulfate).
1-Epinephrine base, syn., USP, bots., 100 gram lots gram .58 - —
Erigeron oil, cns. lb.11.00 - —
Ergot, NF, dms., tin-lined lb. 1.50 - —
Eserine salicylate, bots oz.54.75 - —
Eserine sulfate, bots oz.86.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .17 - —
Ester gum, wood-rosin type, dms., c.l., same basis lb. .17 - —
Ether (see specific product)
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
95-98%, dms., c.l., dlvd lb. .15¼- —
dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¾- —
tanks, dlvd lb. .12¾- —
99%, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd lb. 17 - —
tanks, dlvd lb. .13 - —
Syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
95-98%, dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¾- —
tanks, dlvd lb. .12¾- —
99%, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd lb. 17 - —
tanks, dlvd lb. 13 - —
Ethyl acetoacetate, dms., c.l., dlvd lb. .58½- —
dms., t.c.l., dlvd lb. .60 - —
tanks, dlvd lb. .56 - —
Ethyl acrylate, dms., c.l., t.l., dlvd lb. .36 - —
dms., t.t.l., dlvd lb. .37 - —
tanks, dlvd lb. .34 - —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd E. of Rockies gal.20.63 —
dms., t.c.l., same basis gal.20.68 -20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal..68 —
dms., t.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 —
Ethyl alcohol, absolute, 200 pf., tax paid, dms. dlvd. E. of Rockies gal.21.75 —
dms., t.c.l., same basis gal.21.80 -21.86
tanks, same basis gal.21.59 —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots lb. .90 —
Ethyl bromide, tech., 98%, dms., c.l., frt. alld.E lb. .43 - —
dms., t.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E. lb. .41 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 - —
dms., t.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., t.c.l., t.t.l., works lb. .36¾- —
tanks, works lb. .34 - —
Ethyl butyrate, works lb. .90 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld E lb. 75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E. lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 - —
Ethyl chloride, tech., cyls., works. lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate, cns. lb. 3.35 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., t.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E. lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .27 - —
Ethyl ether, anesthesia, USP, dealers, 1-lb. cns lb. 1.01 - —
½-lb. cns. lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Ethyl ether, indust., dms., c.l., dlvd. lb. .13½- —
dms., t.c.l., dlvd E lb. .15 - —
tanks, dlvd. E. lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., t.c.l., t.t.l., dlvd. E. lb. .38½- —
tanks, dlvd. E lb. 34½- —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., t.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms c.l., dlvd. lb. .23¾- —
dms., t.c.l., dlvd. lb. .25¼- —
tanks, dlvd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., t.t.l. frt. equald. lb. .52½- —
tanks, frt. equald. lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz.11.85 - —
N-Ethyl-a-naphthylamine, Ethyl oenanthate, dms. lb. 1.20 1.50
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate, dist (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., dlvd lb. .44½- —
dms., t.c.l., dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb 1.02 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
N-Ethyl-o-toluidide, bbls lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld. lb. .58 - —
tanks, frt alld. lb. .55 - —
Ethylbenzene 99% dms., c.l. or t.l., frt. equald lb. .15 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., t.c.l., works lb. .30¾- —
Ethylene, contract, ref'y gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., t.c.l. frt. equald. lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., t.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., t.c.l., dlvd. E. lb .23 - —
tanks, dlvd E. lb. .19¼- —



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Jefferson can also promptly supply your needs in soda ash, caustic potash and sodium bicarbonate. Before making any future commitments for these products, it will certainly pay you to check with Jefferson . . . 1121 Walker Avenue, Houston 2, Texas.

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Ethylene Oxide, Glycols, Dichloride • Ethanolamines • Morpholine • Piperazine
Polyethylene Glycols • Nonyl Phenol • SURFONIC® Surface-Active Agents
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Soda Ash • Sodium Bicarbonate

JEFFERSON CHEMICAL COMPANY, INC.

HOUSTON • NEW YORK • CHICAGO • CLEVELAND • CHARLOTTE • LOS ANGELES

Ethylene glycol monoethyl ether, dms., c.l., dlvd. E. lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E. lb. .20½- —
tanks. dlvd., E. lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, dlvd., E. lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms lb. .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E. lb. .24½- —
tanks, dlvd E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over lb. 6.75 - —
Eucalyptol, USP, cns., dms. lb. .90 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb. .51 - —
NF, rectified, 80-85%, dms. lb. .57 - .95
Eugenol, USP, dms lb. 2.30 - 3.00
Tech., dms. lb. 1.45 - —
Euphorbia herb, bls lb. .12 - .15

F

F salt, paste, tech., dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton.19.50 - —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns. lb. 3.10 - —
Fennel seed, Argentine, bgs. lb. .14½- —
French, light, bgs lb. .20 - —
Indian, light, bgs. lb. .21 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .18 - —
Fenugreek seed, Moroccan, bgs lb. .07½- —
Ferric chloride, annyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bnls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
Ferric chloride, 42°Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald., 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., works lb. .07½- .09
Ferric citrate, gran., dms. lb. .88 - —
Ferric hypophosphite, NF, dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .79 - —
Ferric resinate, 6¾% Fe., dms., ton lots, frt. alld lb. .36½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton.35.25 - —
bgs., l.c.l., works ton.36.25 - 42.25
bulk, c.l., works ton.33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green, pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP, cryst., bbls., dms. lb 09½- .10
Fir balsam, Canada, bbls. gal.32.00 -35.00
Oregon, bbls. gal. 3.75 - 4.00
Fir oil, Canada, cns. lb. 2.85 - 4.00
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .0950- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram., dms. 1,000,000 units. .17½- —
500,000 A units per gram., dms., 1,000,000 units. .18 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton.130.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton.125.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo or more gram. .44 - —
10% feed grade, fib. dms., 3 kilos or more kilo.44.00 - —
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0645- —
tanks, dlvd lb. .0380- —
Formaldehyde, 37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0350- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .70 - —
Fuller's earth, bgs., c.l., fill. mines, ton.19.00 - —
Fuller's earth, calcined, bgs., c.l., same basis ton.20.00 -21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton.17.50 - —
Oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh, bgs., c.l., same basis. ton.17.50 -18.00
Spent, bgs., c.l., ship't point ton. 4.50 - 5.00
Fumaric acid, tech., 250-lb. dm., c.l., frt. alld. lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E. lb. .12 - —
tanks, dlvd. W. lb. .13 - —
Furfuryl alcohol, cns., works lb. .29 - —
dms., l.c.l., Memphis, Tenn. lb. .21 - —
tanks, Memphis, Tenn. lb. .184 - —
Furfuryl alcohol, dms., c.l., Newark, N. J. lb. .21½- —
dms., l.c.l., Newark, N. J. lb. .22½- —

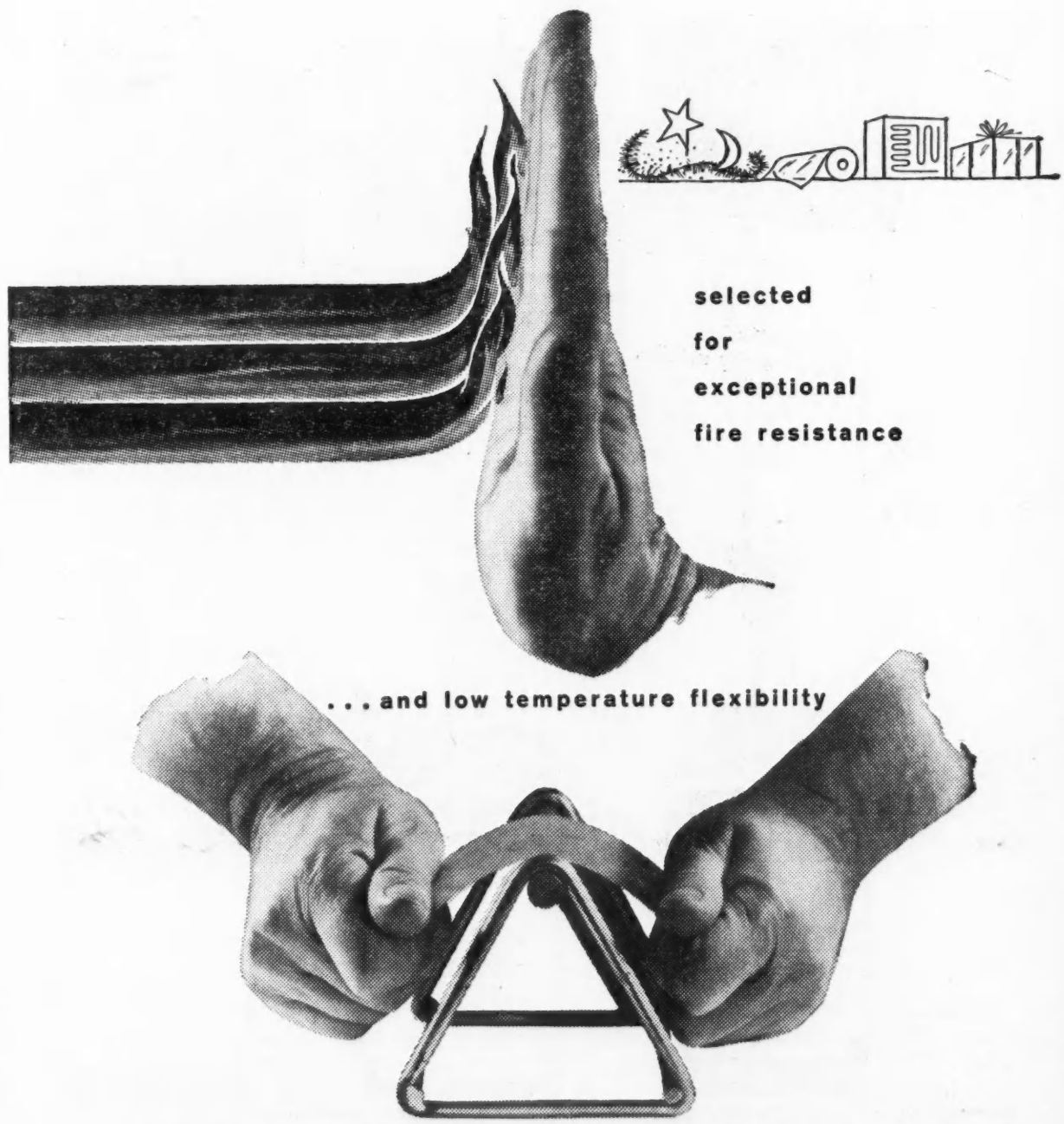
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.23
Gallic acid, tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Paste, bbls., frt. alld lb. 1.70 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin), 75 AOAC test, bbls., c.l. lb. .53 - —
150 AOAC test, bbls., c.l. lb. .62 - —
200 AOAC test, bbls, c.l. lb. .68 - —
225 AOAC test, bbls., c.l. lb. .70 - —
275 AOAC test, bbls., c.l. lb. .78 - —
Gelsemium root, bls. lb. .26 - —
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs. lb. .30 - —
Powd., bbls., bxs lb. .30 - —
Geraniol, extra, cns., dms lb. 1.90 - 3.00
Soap grade, dms. lb. 1.10 - 1.75
Standard, cns., dms. lb. 2.00 - 3.40
Geranium oil, Algerian, cns lb.19.50 - —
Bourbon, cns. lb.20.50 -22.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb 2.00 - 2.70
Ginger oil, dist., bots lb.10.50 -14.00
Ginger oleoresin, NF, from African root, bots lb. 5.00 - 5.60
NF, from Jamaican root, bots. lb. 8.75 -10.25

Ginger root, Cochin, bgs lb. .16 - —
Jamaican, No. 3, bgs lb. .32 - —
Nigerian, split, bgs lb. .13 - —
Sierra Leone, bgs lb. .19 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld lb. .18 - —
dms. l.c.l., frt. alld. lb. .20½- —
tanks, frt. alld. lb. .13½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., dlvd. lb. .15 - —
131 jellygrams, bgs., c.l., same basis lb. .17 - —
164 jellygrams, ogs., c.l., same basis lb. .17½- —
191 jellygrams, bgs., c.l., same basis lb. .19 - —
222 jellygrams, bgs., c.l., same basis lb. .22 - —
40 jellygrams, bgs., c.l., same basis lb. .16 - —
65 jellygrams, bgs., c.l., same basis lb. .18 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.

Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .16 - —
95-121, bgs., c.l., dlvd lb. .17 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. 28 - —
267-298, bgs., c.l. dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .44 - —
Hide glue, l.c.l. prices 2c higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.85 - —
l-Glutamine, bots., 1-9 kilo lots, gram. .15 - .27
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd lb. .20½- —
nat., crude, soaplye, 80% tanks, dlvd lb. .19½- —
Imp., nat., crude, soaplye, 80%, c.i.f. lb. .17 Nom.
Glycerine, nat., refd., USP CP, 99%, dms., c.l., dlvd lb. .29¾- —
dms., l.c.l., dlvd lb. .29⅞- —
tanks, dlvd. lb. .27⅛- —



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Glycerine—Hyoscyamine Sulfate

Glycerine, nat., refd., USP, 98%, dms., c.l., dlvd. lb. .28½- —
dms., l.c.l., dlvd lb. .29 - —
tanks, dlvd. lb. .26¾- —
high gravity, dms., c.l., dlvd lb. .29¼- —
dms., l.c.l., dlvd. lb. .29¾- —
tanks, dlvd. lb. .27½- —
Syn., dms., c.l., dlvd. lb. .29½- —
dms., l.c.l., dlvd. lb. .30 - —
tanks, dlvd. lb. .27¾- —
Glycine (see Aminoacetic acid)
Glycerol (see Glycerine)
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. 18 - —
Golden seal root, NF, tested, bls lb. 2.50 - 2.75
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.70 - —
Grapefruit oil, dms. lb. 2.00 - 2.75
Graphite, amorp, powd., bgs., fib. dms., ex whse lb. .06 - .09½
cryst., 88-90%, powd., bgs., fib. dms. ex whse lb. .19 - .21½
Graphite, amorph., cryst., 90-92%, ex whse. lb. .21 - .24½
powd., bgs., fib dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd. lb. .07¾ Nom.
Yellow, tanks, dlvd. lb. .06⅜- .06½
Grease oil, No. 1, dms., c.l. lb. .15¾- —
dms., l.c.l. lb. .16¾- .18¾
extra winter, strained, dms., c.l. lb. .18¼- —
dms., l.c.l. lb. .19¼- .21¼
prime, burning, dms., c.l. lb. .19¾- —
dms., l.c.l. lb. .20¾- .22¾

Green Pigments

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb. .45 - —
Guaiacol, NF, cryst., dms., tips lb. 2.10 - 2.15
NF, liq., cbys., dms. lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms. lb. 3.40 - 3.45
Guaiacwood oil, cns lb. .75 - 1.30
Guar gum, food grade, bgs., c.l. lb. .38 - .44
bgs., 5,000 lbs. or more lb. .39 - .44
Indust., bgs., c.l. lb. .32 - —
Tech. grade, bgs. lb. .30 - .33

Gums

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton. 20.30 - —
Terra alba, dom., 100-lb. paper bgs., trucks, same basis ton. 20.00 - —
100-lb. paper bgs., trucks, works, New York ton. 17.00 - —
l.c., imp., English, 100-lb. paper bgs., ex dock, New York. ton. 55.00 - —
100-lb paper bgs., ex whse. ton. 60.00 - 62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. .95 - —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies lb. 2.45 - —
Hansa G yellow, pigment, bbls lb. 2.20 - —
Hawthorn berries, bgs. lb. .18 - .20
Heliotropin, 100-lb. lots, dms. lb. 2.50 - 3.00
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.50 - —
Hemlock oil, cns lb. 2.55 - 3.00
Henbane leaves, bls. lb. .30 - .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld. lb. .96 - —
Heptane, indust., tanks, Bayonne, N. J. gal. .20 - —
tanks, Baytown, Tex. gal. .16¼- —
tanks, Borger, Tex. gal. .16¼- —
tanks, Houston, Tex. gal. .16¼- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb. 22.50 - —
bots., 5-lb lots, works lb. 23.00 - —
bots., 1-lb lots, works lb. 23.50 - —
Hexachlorophene, dms. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48⅛
Hexane, indust., tanks, Bayonne, N. J gal. .20 - —
tanks, Borger, Tex., dlvd gal. .16 - —
tanks, Houston, Tex. gal. .16 - —
1-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l. works lb. .35¾- —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works lb. .76 - —
Hexyl salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms., smaller lots, dlvd. lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.50 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100%, ret. dms., works lb. 1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys. lb. 2.92 - —
1.70 s.g. cbys. lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30¼
tanks, dlvd. zone 1 lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs. 3.15 - —
tanks, works frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 - —
tanks, works frt. equald ton. 35.00 - —
Hydrochloric acid, CP, USP, consumers cbys. extra c.l. works lb. .15¾- —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.30 - 1.75
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.30 - 1.75
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 22.50 - —
Hydrofluoric acid, aqueous, 70%, tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .16 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E. lb. .30½- .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd. lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l., dlvd. lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellal, cns. lb. 4.00 - 4.80
Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. .96 - —
2,000 to 19,999-lb. lots, same basis lb. .99 - —
150 to 1,999-lb. lots, same basis. lb. 1.02 - —
Less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose, high viscosity grades, 20,000-lb. lots or more, more, f.o.b. shipping point lb. 1.01 - —
2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
Hydroxyethyl cellulose, 85 to 1,999-lb. lots, same basis lb. 1.07 - —
Less than 85-lb lots same basis.
Hyoscine salts (see Scopolamine) lb. 1.17 - —
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —

Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works lb. .85 • —
NF, 30%, cbys., all quantities, same basis lb. .75 • —

I

Ichthammol, NF, dms. lb. .75 • 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots lb. 15.75 -18.25
Inositol, bots., dlvd. lb. 5.00 • —
dms., dlvd. lb. 4.50 • 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 • —
Resub., USP, dms., f.o.b. works lb. 2.00 • 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 • —
Iodoform, NF, dms., kgs. lb. 4.90 • 5.00
a-Ionone, cns. lb. 3.85 • 5.00
b-Ionone, cns. lb. 3.85 • 5.85
Ipecac root, whole, bgs. lb. 8.00 • 8.50
Powd., bbls., bxs. lb. 9.50 -10.00
Irish moss, bleached, prime, bls. lb. .22 • .25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 • —
bbls., l.c.l., ton lots, same basis. lb. .58 • —
bbls., smaller lots same basis lb. .59 • —
Iron blue, dom., reg., bbls., c.l., dlvd. E lb. .52 • —
bbls., l.c.l., ton lots, same basis lb. .53 • —
bbls., smaller lots, same basis. lb. .54 • —
Iron blue, imp., British, reg., bbls., c.l., dlvd. E lb. .48 • —
bbls., l.c.l., ton lots, same basis lb. .49 • —
bbls., smaller lots, same basis. lb. .50 • —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 • —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse. New York, lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l lb. .023 • .024
Iron oxide, yellow, pure, light lemon shade, bgs. c.l., works lb. .12¼- —
Other shades, same basis lb. .12 • —
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
Isoborneol, cns. lb. 1.44 • 1.80
Isobornyl acetate, cns. lb. .48 • .56
Isobornyl formate, dms. lb. 1.20 • —
Isobornyl proprionate, dms. lb. 1.25 • 1.35
Isobutyl acetate, perfume grade, cns lb. .75 • 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .16 • —
dms., l.c.l., dlvd lb. .17½- —
tanks, dlvd. lb. .13½- —
Isobutyraldehyde, CP, cms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd. lb. .22 • —
dms., l.c.l., dlvd. lb. .23 • —
tanks, dlvd. lb. .19½- —
Isoeugenol, cns. lb. 3.50 • 4.90
Isoniazid, powd., kilo or more kilo. 18.00 • —
Isonicotinic acid, 100-lb. fib dms., works lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E lb. .25 • —
tanks, dlvd. E. lb. .21 • —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 • —
dms., l.c.l., same basis lb. .162 • —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 • —
dms, l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 • —
dms., l.c.l., dlvd gal. .63 • —
tanks, dlvd. lb. .42 • —
Refd., 95%, c.l., dms., dlvd. gal. .60 • —
dms., l.c.l., dlvd gal. .70 • —
dms., t.c.l., dlvd gal. .72 • —
tanks, dlvd. gal. .46 • —
tanks, dlvd. gal. .44 • —
anhyd., c.l., dlvd gal. .62 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd lb. .11 • —
tanks, dlvd lb. .07 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 • —
dms., t.c.l., works lb. 1.05 • 1.25
tanks, works. lb. .99 • —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib. dms., c.l., t.l., works lb. .75 • —
450-lb fib. dms., l.c.l., works lb. .80 • .90
Isoquinoline, dms., works lb. .65 • 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., 250-lb. dms., c.l., same basis. lb. .39 • —
dms., l.c.l., same basis lb. .40 • —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 • —
Powd., bbls., same basis lb. 2.75 • —
Jalap root, NF, bls. lb. .90 • —
NF, powd., bbls., bxs. lb. 1.15 • —
Japan wax, cs lb. .27 • .29
Juniper berries, bgs. lb. 15 • —
Juniper berry oil, bots. lb 2.90 • 3.75
Twice rectified bots. lb. 3.60 • 7.00
Juniper tar oil, NF, dms. lb. .42 • .90
Juniper wood oil, tech. cns. lb. .36 • .38

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 • .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum No. 1, NF, powd. bls. lb. .45 • .48
No. 2, powd., bbls lb. .40 • .42
No. 3, powd., bbls lb. .35 • .37
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 • —
Kola nuts, bgs. lb. .10 • —

L

L acid, bbls., works lb. 1.25 • —
Lacquer diluent, petroleum, 150°-240° F b.r., tanks, west coast, ex tax, Los Angeles gal. .174 • —
150°-240° F. b.r., tanks, east coast, N. J., N. Y. gal. .20 • —
Lacquer diluent, benzene type, tanks, group 3 gal. .1550- —
Toluene type, tanks, group 3 gal. .14375- —
tanks, Houston, Tex. gal. .16 • —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1789- .2740
bbls., dms., 20 or more, frt. equald lb. .1839- .2790
bbls., dms., 5 to 19, frt. equald. lb. .1889- .2840
bbls., dms., 1 to 4, frt. equald. lb. .1938- .2890
80%, c.l., bbls., dms., frt. equald lb. .3039- .4625
Lactic acid, edible, 80%, bbls., dms., 20 or more, frt. equald lb. .3089- .4675
bbls. dms. 5 to 19 frt. equald. lb. .3139- .4723
bbls., dms., 1 to 4 frt. equald. lb. .3189- .4775
Lactic acid, plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4625- —
bbls., 5 to 19, works lb. .4725- —
bbls., 1 to 4, works lb. .4775- —
Lactic acid, tech., 22%, bbls., c.l., works 100 lbs. 6.80 • —
bbls., l.c.l., works 100 lbs. 7.20 • —
44%, bbls., c.l., works 100 lbs. 11.45 -12.70
bbls., l.c.l., works 100 lbs. 11.85 -13.10
USP, 85%, cbys. lb. .85 • —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 • —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18¼- —
bgs., l.t.l., frt. equald lb. .19 • .19¾
Lady's slipper root, bls. lb. 3.50 • 3.75
Lake C red toner, alizarine, bbls., works lb. 1.25 • —
Lamp black, bgs., c.l., works lb. .16 • .45
Lanolin, cosmetic, dms., works lb. .27 • .29
USP, anhyd., dms., works lb. .24 • .26
hydrous, dms., works lb. .23 • .25
Lard, cash, dms. lb. .09¼- —
Lard oil (see Grease oil).
Larkspur seed, ogs. lb. .35 • —
Laurel leaf oil, dms., cns. lb. 9.75 -12.50
Laurent's acid, bbls. lb. .60 • —
Lauric acid, pure, dms. lb. .38½- .41
tanks lb. .36 • —
Lauryl alcohol, bots. lb. 2.00 • 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l., works lb. .66 • —
Lavandin oil, 22-24%, dms. lb. 1.25 • 2.00
Abrial, dms. lb. 1.00 • 1.50
Lavender flowers, medium, bls. lb. .55 • .60
Ord., bls. lb. .20 • .25
Select., bls. lb. .90 • 1.00
Lavender flower oil, USP, French, 35-37% ester, cns. lb. 2.75 • 6.75
40-42% ester, cns. lb. 5.00 • 7.75
Spike, Spanish, cns. lb. 2.20 • 3.00

Almost any

can be improved with an alkyd or polyester formulation based on Oronite Isophthalic

Contact your resin or paint supplier. Ask about his alkyd and polyester formulations employing Oronite Isophthalic. Oronite has made available to resin and paint producers a series of suggested Isophthalic alkyd and polyester formulations, together with resin samples, cooking techniques and testing methods. Superior coatings, based on Oronite Isophthalic, are now being offered in every protective coating classification.

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Lead acetate, NF, cryst., gran., powd lb. .34½- —
White, cryst., bbls lb. .25½- —
gran., bbls lb. .26½- —
powd., bbls lb. 26½- —
Lead arsenate acid powder, dealers, 3-39 lb. bgs or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb. bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls, c.l., shipt point, frt alld. lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, dms. lb .52 —
Lead iodide NF V jars lb 3.62 - —
Lead linoleate, fused, 25% Pb dms. lb. .38 —
Lead metal, prime, pigs, New York lb. .12 -
St. Louis lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb .143 —
bgs. l.c.l., same basis lb .153 —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb 19½- —
24% Pb, dms., dlvd. lb. 24¾- —
Solid, 37% Pb, dms., dlvd. lb 31¾- —
Lead nitrate, bbls. lb. 24¼ .26¾
Lead orthosilicate-gel, 50-60% PbO_2, dms., works lb. 29¾ .34¼
Lead peroxide, tech. powd. bbls lb. .45 .50

Lead phthalate, dibasic, dms., works, lb .41 - —
Lead, red, 95% Pb_3O_4, or less bbls., c.l., works, frt. equald lb. .14¼- —
bbls., l.c.l., same basis lb. .15¼- —
97% Pb_3O_4, bbls., c.l., same basis, lb. .1445- —
bbls., l.c.l., same basis lb. .1545- —
98% Pb_3O_4, bbls., c.l., same basis, lb. .1460- —
bbls., l.c.l., same basis lb. .1560- —
Lead resinate precip 23% Pb, dms. ton lots, dlvd lb .40¼ —
Lead salicylate normal dms. works, lb .46 —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l., f.o.b. mfg. point, frt. alld lb. .19½- —
bgs., l.c.l., same basis lb. .20½- —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb. dms lb .15 - —
24% Pb, dms. lb. .21¼- —
Solid, 30% Pb, dms lb .23¼ - —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt. frt. alld lb. .15¾- —
bgs., l.c.l., same basis lb. .16¾- —
Lead, white, basic sulfate bgs., c.l., shipt. pt., frt alld lb. .16¼- —
bgs., l.c.l., same basis lb. .17¼- —

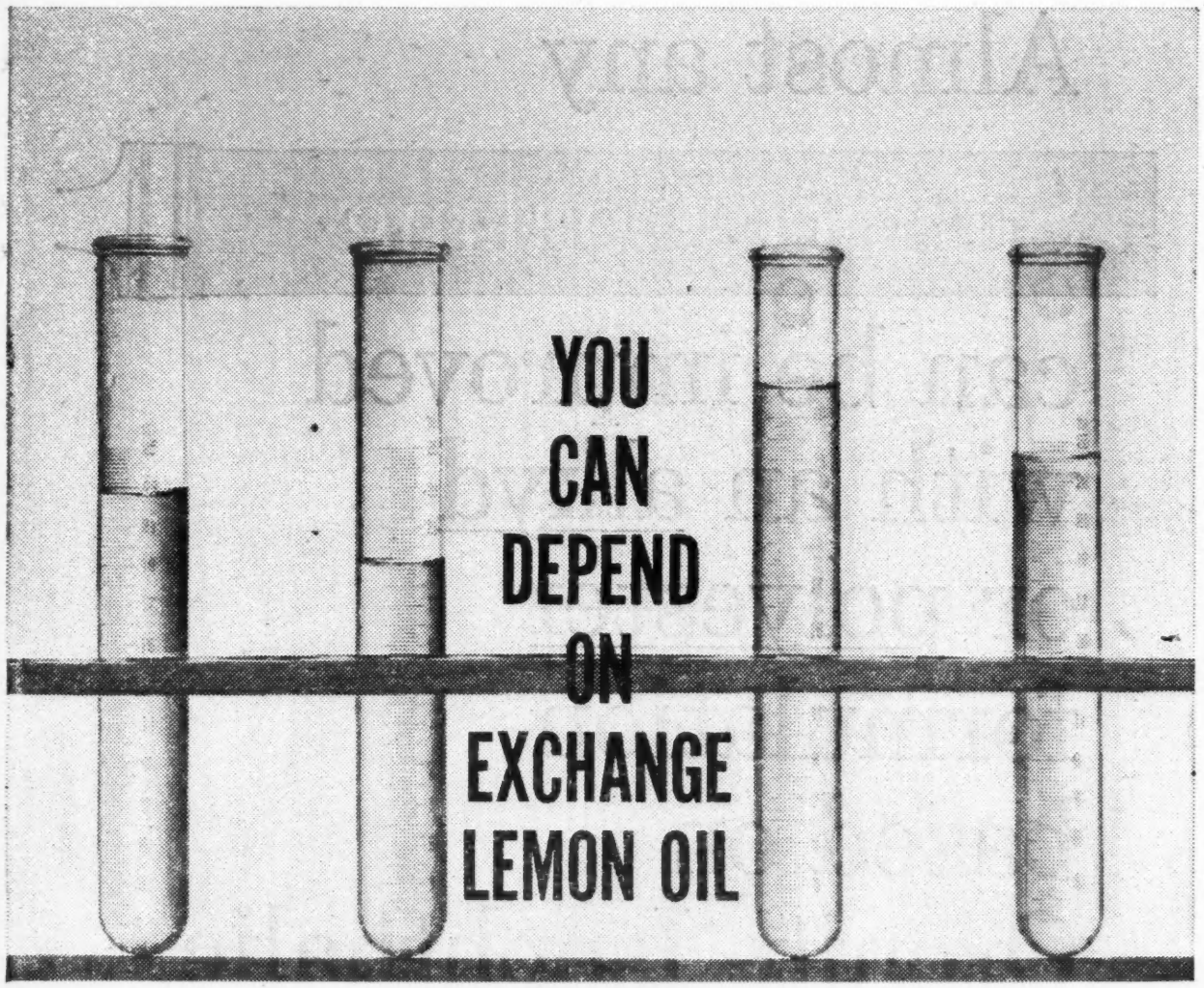
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .18
non-ret. dms. l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret dms., l.c.l., same basis lb. .14 - .15

Lemon bioflavonoid complex, fib. dms., 25-lb lots, works lb. 9.00 - —
Lemon oil, USP, Calif., cns., dms. lb. 2.70 - 3.50
Messina, cns. lb. 4.25 - 9.00
Lemongrass oil, cns. dms. lb. .95 - 1.25
dl-Leucine dms. works lb 12.25 -15.00
Licorice root, gran., bls. lb. .13 - —
Powd., bls. lb. .15 - .16
Whole, bls lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17 25 - —
Chemical, spray, bgs c.l., same basis ton. 18.25 - —
For New York delivery, add $8.29 freight charge.
Lime oil, dist., Mexican, cns lb. 6.25 6.75
West Indian, cns lb 6.50 7 80
Expressed, West Indian, cns lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 3.70 - 4.35
Syn., 95-100%, dms., works lb. 3.70 - —

Linalyl acetate, ex bois de rose, 90-93%, dms lb. 3.80 - 4.00
96-98%, dms. lb. 4.10 - 4.80
Syn., 98-100%, dms., works lb. 3.70 - —
Lindane, 25% formulation to distributors dms., frt. alld lb. 1.35 1.50
Lindane, tech. to formulators, dms., 1-2,000 lbs., dlvd lb. 2.40 —
Linden flowers, with leaves, bls lb .25 —
Without leaves, bls. lb. .35 - .40
Linseed meal, expeller, 32% bulk, Minneapolis mills ton. Nominal
Extracted, 34% bulk, same basis. ton. 62.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1600- —
dms., l.c.l., New York lb. .17 - 1750
tanks, f.o.b. Minneapolis lb. .1250- —
tanks, New York lb. .1400- —
tankwagon, New York lb. .1450- .1460
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acids, dist., dms lb. .1900- —
Water-white, dms lb. .2200- —
Litharge, coml., powd. bbls., c.l., works, frt. equald lb. .13¾- —
bbls., l.c.l., same basis lb. .14¾- —
Lithium aluminum hydride, lump, tins. works lb. 33.00 39.00
Lithium benzoate, dms lb 1 65 1.67
Lithium bromide, NF, gran. works frt equald lb 2.60 -
Lithium carbonate, NF, dms. c.l., t.l. dlvd lb 4.29½ —
dms., ton lots to t.l. dlvd lb 1.30 1.30½
Tech., dms. c.l., t.l. frt alld lb. 67 —
dms., ton lots, same basis lb. 73 - —
dms., smaller lots same basis. lb. 79 - —
Lithium chloride, cr. anhyd., dms., ton lots lb. 1.23½ —
Tech., anhyd., dms. c.l., t.l., dlvd. or works, frt alld lb. .87 —
dms., l.c.l., same basis lb. .88 - .92
Lithium citrate, NF, dms ton lots. lb 1 50 —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2 15 —
bbls., ton lots and more, dlvd. lb 2.18½- —
bbls., less ton lots, dlvd lb. 2.23½- —
Lithium hydride, powd., dms., 500-lb lots or more, works lb 9.50 —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt alld lb. 72 - —
dms., l.c.l., frt. alld lb. 73 - —
Lithium manganite dms., works. lb. .95 1 05
Lithium nitrate, tech., dms., 100-lb lots lb. 1.15 1 25
Lithium salicylate, dms lb. 1.60 1 70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate, dms., c.l., works. lb. .47½ —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 1 25
Lithium titanate, dms., works lb. 1.15 1.25
Lithol red toner, barium, bbls., works lb. .98 —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd E. lb. .03½- —
bgs., l.c.l., dlvd. E lb. .09½- —
Lithopone, titanated (high-strength), bgs. c.l. dlvd lb. .11 - —
bgs., l.c.l., dlvd. lb. .12 - —
Lobelia herb bls lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz. 50.00 - —
Locust bean gum, powd., bgs. lb. .38 - .40
Lycopodium, cs. lb. 4.00 - —
l-Lysine monohydrochloride, 25, 50-lb. dms lb. 6.00 - —

M

Mace, Siauw, No. 1, bls lb. 2.20 - —
No. 2, whole, bls lb. 1.85 - —
sifting, bls. lb. 1.70 - —
Mace oil, dist., cns., dms lb. 9.75 -15.75
Magnesia, calcined, tech, bgs., ctns., frt equald lb. .25¾ .26¼
Tech., syn., rubber grade, light, bgs., c.l., frt equald lb. .28¾ .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 —
bgs., l.c.l., frt. equald lb. .28¾ —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, USP, light bgs. lb. .36½- .37¼
heavy, fib dms lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 86.25 - —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton. 46.00 - —
Magnesium bromide, cs., jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 —
bgs., l.c.l., frt equald lb. .15 16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Magnesium chloride, hydrous, 99% flake, bgs., c.l., works ton. 55.00 —
bgs., l.c.l., works ton. 65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25¼
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. 75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works 100 lbs 2 90 3.15
USP, cryst., bgs., c.l., works 100 lbs 2.35 —
bgs, l.c.l., 5,000 lbs., 1 with-drawal 100 lbs. 3.10 - —
bgs, smaller lots 100 lbs 3.35 - —



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Sunkist Growers

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Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼ - —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾ - —
dms., l.c.l., dlvd. E. of Rockies lb. .29¾ - —
tanks, dlvd. E. of Rockies lb. .27¾ - —
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .45 - .48
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½ - —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .18
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾ - —
smaller lots, works lb. .23½ - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾ - —
Solid, precip., 8.2% Mn, bbls lb. .41¼ - —
Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 - —
dms., ton lots, dlvd. E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn. dms., frt. alld lb. .29¾ - —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼ - —
Precip., 6½ 7% Mn dms lb. .33 - —
Manganese sulfate, tertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton.97.50 - —
bgs., l.c.l., dlvd. S. E. ton.104.50 - —
Manganese tallate, 6%, dms. lb. .26 - —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs. lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l. works lb. .39 - —
bgs., l.c.l. works lb. .31 - —
Menadione USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07½ - —
Menthol, nat., USP, Brazilian, cs. lb. 6.00 - —
Japanese, cs. lb. 7.00 - 7.18
Syn., USP, racemic cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 - —
tech., bbls., 1,000-lb. tots lb. 5.58 - —
bbls., smaller lots lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 75 lbs. per flask, net-flask.243.00 - 245.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .73
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m- Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2.4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½ - .80
tanks, works lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½ - —
dms., l.c.l., dlvd gal. .61½ - —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
zone 2, dms., c.l., or t.l., min., frt. alld. or dlvd gal. .55½ - —
dms., l.c.l., works gal. .65½ - —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd.gal. .30 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb.27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxy-analogue, (calcium salt) 90% min., dms., t.l., frt alld lb. 1.25 - —
dms., l.t.l., same basis lb. 1.29 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs., Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½ - —
non-ret. dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½ - —
non-ret. dms., l.c.l., same basis, lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½ - —
Syn., dms., c.l., frt. alld E. gal. .56 - —
dms., l.c.l., frt. alld. E. gal. .76 - —
tanks, frt. alld. E. gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½ - —
tanks, dlvd E. lb. .14½ - —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methylamyl ketone, dms., works lb. 1.03 - —
N-Methylaniline, tech., tanks, frt. alld, lb. .68 - —
Methyl anthranilate, cns. lb. 2.25 - 2.75
Methyl benzoate, cns., dms. lb. .65 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
Methyl cellulose, special vis., (1,500-4,000 cps.), 50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.03 - —
Methyl cellulose, standard vis. (15-400 cps.), 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld, on 100-lbs lb. .79 - .89
Methyl chloride, indust., cyls., frt. equald lb. .22¼ - —
tanks, multi-unit, same basis. lb. .16¼ - —
tanks, single unit, same basis. lb. .12¾ - —
Refrigerator mfrs., cyls., dlvd lb. .48¾ - —
other consumers or service men, cyls., dlvd lb. .67¾ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾ - —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23.000 lbs., works lb. .21½ - —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots lb.28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½ - —
tanks, same basis lb. .29 - —

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Unadulterated
California

LEMON OIL

U.S.P.

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MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
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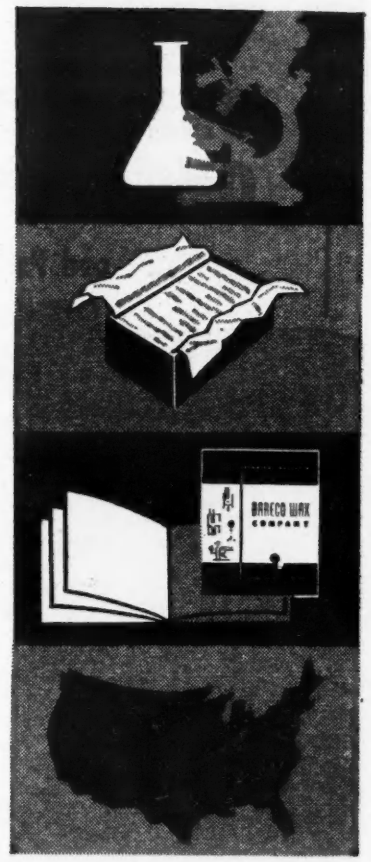
137 Boston Post Road, Cos Cob, Conn.

Methyl naphthyl ketone, cryst., cns. lb. 3.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech., 80%, dms., frt. alld. E lb. .24 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., t.l., dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgs., l.c.l. ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse, or freight alld. E lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs. ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
l.c.l., ex-whse., or frt. alld. E. lb. .09 - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
Microcrystalline wax, petroleum, laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .63 - —
non-ret. dms., l.c.l., same basis gal. .67 - —
tankcars, refy. gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy. gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., l.c.l., same basis gal. .68 - —
tankcars, refy. gal. .47 - —
135-136 vis., non-ret. dms., c.l., same basis gal. .69 - —
non-ret. dms., l.c.l., same basis gal. .74 - —
tankcars, refy. gal. .53 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .75 - —
non-ret. dms., l.c.l., same basis gal. .80 - —
tankcars, refy. gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., l.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
200-210 vis., non-ret. dms., c.l., f.o.b. New York gal. .84 - —
200-210 vis., non-ret. dms., l.c.l., same basis gal. .89 - —
tankcars, refy. gal. .63 - —
300-350 vis., non-ret. dms., c.l., f.o.b. New York gal. .84½- —
non-ret. dms., l.c.l., same basis gal. .89½- —
tankcars, refy. gal. .68½- —
Mineral orange, American, bbls., c.l., works lb. .1560- —
bbls., l.c.l., same basis lb. .1660- —
Mineral spirits, petroleum, odorless, tanks, refy. Watson, Calif. gal. .25 - —
tanks, Borger, Tex. gal. .25 - —
Houston, Tex. gal. .25 - —
Philadelphia gal. .32 - —
Newark gal. .29 - —
New York, dlvd. gal. .30½- —
Wood River, Ill. gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal. .169 - —
tanks, east coast, New Jersey, New York gal. .18 - —
tanks, group 3 gal. .12875- —
tanks, Houston, Tex. gal. .145 - —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .11¾- .12
tanks, New York ga' .6 - —
Molybdated orange, bbls. lb. .3 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd, E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono)
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd, E lb. .27½- —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis, lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, same basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., l.c.l., frt. equald., 100% basis lb. .36½- —
tanks, frt. equald., 100% basis, lb. .26 - —
40% soln., dms., frt. equald, 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald., 100% basis, lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., l.c.l., dlvd. E. lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms, 100-lb. lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd lb. 1.00 - 1.07
Monosodium phosphate (see sodium phosphate, monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-butyl-m-cresol).
Montan wax, dom., refd., bgs. lb. .29 - .30
Imp., crude, Bohemian, bgs. lb. .22 - .24
German, bgs. lb. .26 - .27
Morphine, cns. oz. 12.40 -12.60
Morphine acetate, anhyd., cns. oz. 9.95 -10.00
Morphine hydrobromide, cns. oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns oz. 9.90 - 9.95
Morphine sulfate, USP, cns. oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E. lb. .56¼- —
tanks, dlvd. E. lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.40 - —
cns., 25-lb. lots lb. 1.45 - —
Mustard seed, Danish, yellow, bags. lb. .11½- —
Montana, yellows, bgs. lb. .10½- —
Oriental, bgs. lb. .08 - —
Mustard oil, syn. bots. lb. 1.60 - 1.85
Myristic acid, bgs. lb. .31½- .34
tanks lb. .30½- —
Myrrh gum, cs. lb. .55 - —

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles gal. .174 - —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 gal. .13875 —
Naphtha, VM&P, petroleum, tankwagon, Boston gal. 21½- —
Chicago gal. .299 - —
Cleveland gal. .24½- —
Houston, Tex. gal. .15½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21¼- —
Pittsburgh gal. .20 - —
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .04¼- —
78°, tanks, same basis lb. .05 - —
Imp., 78°, bgs., large lots lb. .05½ Nom.



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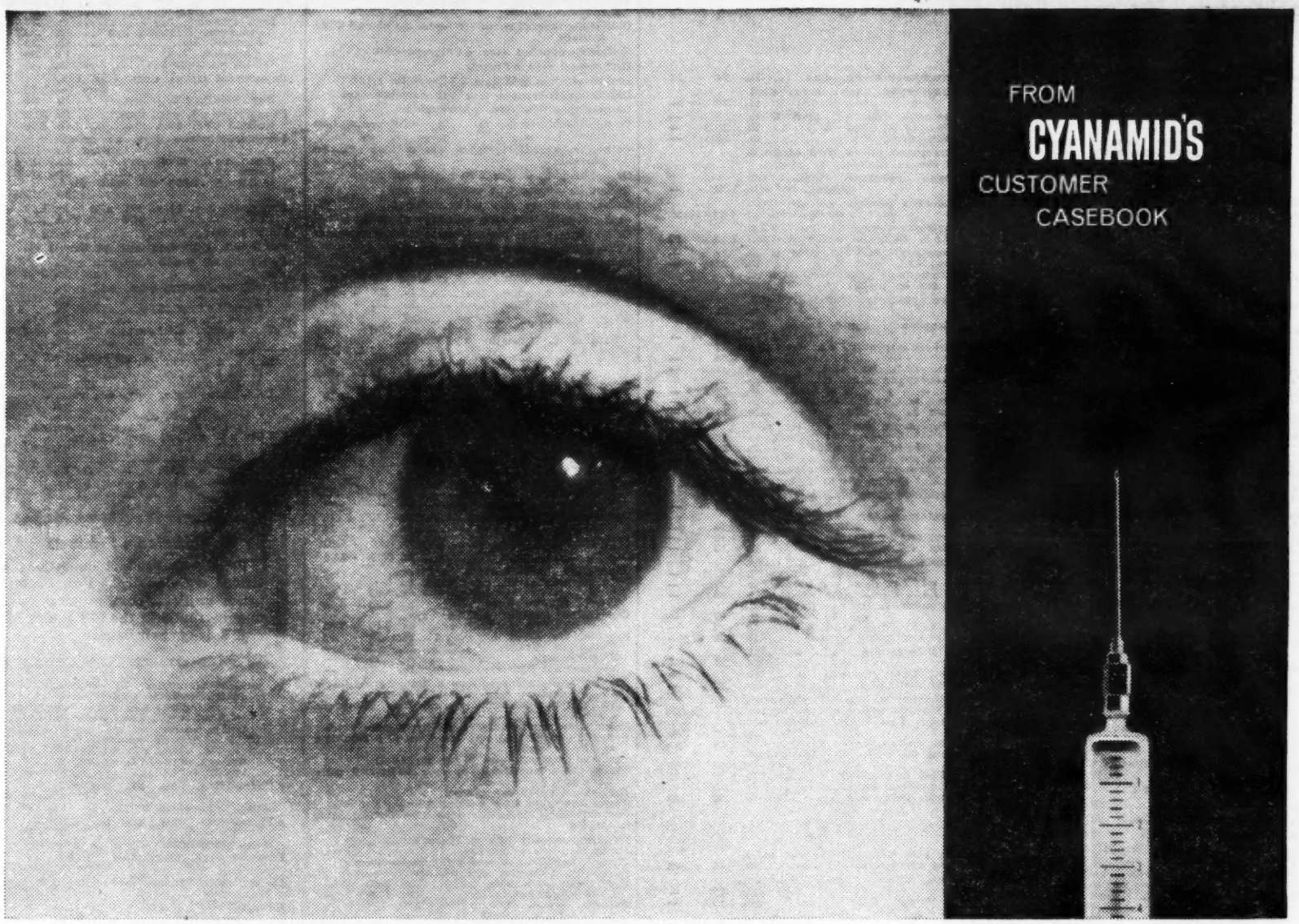

PROBLEM

FIND A WHITER, FINER NEOMYCIN FOR INJECTABLES AND OPHTHALMIC SOLUTIONS

ANSWER

Super White, from American Cyanamid. The whitest, most pharmaceutically elegant neomycin sulfate ever developed. It has an APHA color of 20, far below the normal range. Its potency and other properties meet all U. S. P. standards. Super White . . . the perfect neomycin grade for injectables and ophthalmic solutions. Another example of how Cyanamid reduces your production costs by offering specific neomycin grades for specific applications.

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CYANAMID

AMERICAN CYANAMID COMPANY, FINE CHEMICALS DEPARTMENT,
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Naphthalene refd., indust., chipped, crushed, bgs., frt equald. lb. .12½- —
tanks, same basis lb. .09¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l., same basis, lb. .15¾- —
1-lb. pkgs., c.l., same basis, lb. .18½- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., l.c.l., works lb. .35 - —
Naphthol, ITR, red toner, bbls., works lb 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6 8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, bbls., frt. alld lb. .50 - —
b-Naphthylamine, tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
1-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms lb. 8.50 -
Neatsfoot oil, 15° cold test, dms lb. .30 .33
20° cold test, dms lb. .29 .32
30° cold test, dms lb. .28 .31
Neocinchophen, USP, dms., frt, adjusted lb. 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 —
fib. dms., 100-999-gram lots, basis activity gram .30 - —
Tech., fib. dms gram. .14 - —
Neroli oil, NF, French, bots. lb.425.00 -575.00
Tunisian, bots. lb.400.00 —
Nerolin, cns. lb. 2.55 2.85
Nevile and Winther's acid, dms., frt. alld lb. 1.30 —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .63½- .75½
Nickel carbonate, bbls., dlvd lb. .78¼- .85¼
Nickel chloride, bbls., dlvd lb. .37 .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal, electro cathodes, cs., works lb. .74 —
Nickel nitrate, bbls., works lb. .32½ .33½
Nickel oxide, black, bbls lb. .85 —
Green, bbls. lb. .84 —
Nickel sulfate bgs., c.l., dlvd lb. .28½ .36
bgs., l.c.l., dlvd lb. .28½ .36
Nicotinamide, USP, 50-kilo dm., frt. adjusted kilo. 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - —
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb 1.20 —
40% manufacturers, 500-lb. dms., frt. alld lb 1.05 - —
Nicotinic acid, USP, dms., dlvd kilo 6.00 - —
Nicotinic amide, USP (see Nicotinamide)
Niger seed, bgs lb .10¼- —
Nikethamide cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 —
cbys., l.c.l., works E 100 lbs 6.05 6.85
38° Be., cbys., c.l. works, E. 100 lbs. 6.25 —
cbys., l.c.l., works E. 100 lbs 6.55 7.35
40° Be., cbys., c.l., works, E 100 lbs 6.75 —
cbys., l.c.l., works, E. 100 lbs 7.05 7.85
42° Be. cbys., c.l., works, E. 100 lbs. 7.25 —
cbys., l.c.l., works, E 100 lbs. 7.55 8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb .18½- —
cbys. extra, l.c.l., works lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra cs., l.c.l., same basis lb. .24 .25
4-Nitro-2-aminophenol tech., paste, dms., frt. alld lb. .99 —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms. frt. alld. 100% basis. lb 1.10 - —
o-Nitroaniline, flaked dms. t.l., frt. alld lb. .49 - —
dms., t.l.l. frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt alld lb. .445 —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., l.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., l.c.l., works lb. 64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
Ester-soluble, 18-20 cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
Ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. 44 - 46
Spirit soluble, 5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l., same basis lb. 43 - 45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb 13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd. lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., l.c.l., dlvd E lb. .26½- —
tanks, dlvd. E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N unit. 1.20 - —
Nitrogenous process tankage, bulk, works unit-ton 4.00 Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton. 3.10 - .50
Nitromethane, dms. t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd E lb. .26½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane dms. c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .45 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .15 - —
dms., l.c.l., frt. alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, tanks, works lb. .26½- —
c.l., t.l., dms., same basis lb. .27½- —
l.c.l., dms., same basis lb. .28 - —
p-Nitrotoluene, tech, flake, c.l., t.l., works lb. .27½- —
l.c.l., dms., same basis lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., l.c.l. frt. alld lb. .23 - —
tanks, frt. alld lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.35 - —
West Indian, bgs lb. 1.46 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -15.75
West Indian, cns. lb. 9.50 -15.75
Nux vomica, bls lb. .15 - —
Powd., bbls., bxs lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum, oil, dms. lb. .41 - 65
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd., Zone 1 lb. .43½- —
tanks, dlvd., Zone 1 lb. .39 - —
Octyl alcohol, perfumers' grade. bots lb. 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms. 11c. higher.

Oils

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .22 - .22½
tanks lb. .20½- —
Oleic acid, dbl.-dist. (white), dms. lb. .18½- .21
tanks lb. .16 - —
Single-dist., dms. lb. .17¼- .19¾
tanks lb. .14¾- —
Oleo oil, extra, dms lb. .14 - .14½
Oleostearine, dms. lb. .13½- .13¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .13 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots. lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms. spot, duty-paid gal. 2.40 - 2.60
Olivine, crude, works ton.12.00 - —
20 mesh, works ton.15.00 - —
100 mesh, works ton.20.00 - —
Opium, USP, cns oz.19.20 -19.45
gran., cns. oz.21.65 -21.90
powd., cns. oz.21.65 -21.90
Orange oil, expressed, USP, Brazilian, cns., dms lb. No stocks.
California, cns., dms lb. .85 - .90
Florida, cns., dms. lb. .70 - 1.25
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter cns., dms. lb. 3.25 - 3.85
Sweet, dist., cns., dms lb. .65 - .70
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .35 - .38

Orange Pigments

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 1.80 2.30
Orris root, Florentine, bls. lb. .55 - —
powd., bbls., bxs. lb. .65 - —
Verona, bls. lb. .35 - —
powd., bbls., bxs. lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots., gram 3.00 - 4.00
Ouricury wax, crude, bgs. lb. .76 - .77
Refd., pure, bgs. lb. .82 - .83
Oxalic acid, bgs., dms., c.l., works. lb. .18 - .18½
bgs., dms., 10,000-lb. lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. .19¼- .19¾
b-Oxynaphthoic acid, fib dms., 250 lbs. or more, frt. alld., lb. 1.14 - 1.17
Oxyquinolin sulfate, cns., 100-lb. lots, works, lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1615- .1715
tanks lb. .1355- —
Palm oil acid, dist., dms. lb. .13¾- .19¼
tanks lb. .13¾- .14¼
Palmarosa oil, cns. lb. 3.75 - 4.00
Papain, NF, powd. lb. 5.00 - 7.00
Papaverine hydrochloride, nat. or syn., USP, cns. 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns., oz. 7.10 - 7.35
Paprika, Bulgarian bgs lb. .34 - .35
Hungarian, bgs. lb. .34 - —
Spanish, bgs. lb. .50 - —
Yugoslavian, bgs. lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldenyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.21 - —
Chlorinated, kgs. lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F. ASTM, tanks, refy lb. .0765- —
125°-127°F. ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy. gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .0955- —
bgs., l.c.l., frt. alld lb. .1155- .1255
91%, powd., bgs. c.l., ex whse lb. .167 - —
bgs., l.c.l., ex whse lb. .182 - —
USP-X, fib. dms., c.l. lb. .19 - —
fib dms., 1,000-lb. lots lb. .20 - —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine)
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld. lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls lb. .50 - .55
mills ton.63.00 - —
Patchouli oil, imp., cns lb. 4.80 - 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, old process, bgs., mills ton.53.00 - —
Peanut oil, crude, tanks, f.o.b. mills. lb. .13¼ Nom.
Refd., dms. lb. .18¾- .19
tanks lb. .16¾- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
tech., powd., 150 jelly grade. lb. 1.28 - —
Imp, Danish, ex whse lb. 1.28 - —
Penicillin potassium, cryst., bulk, 1,000,000 units. .027 - .028
Penicillin, procaine, bulk 1,000,000 units. .027 - .028
Pennyroyal oil, USP, imported, cns. lb. 2.30 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. 22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd. lb. .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di- and tri- isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs. lb. .24¾- —
black, Lampong, bgs lb. .24½- —
Red, Funtuas, bgs lb. .30 - —
Japanese, Hontaka, bgs lb. .30 - —
Santaka, bgs. lb. .30 - —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs lb. .45 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP., bls lb. .85 - —
Peppermint oil, nat., dms. lb. 3.70 - 4.65
Redist., USP, dms. lb. 3.90 - 5.15
Perchloroethylene, dms., c.l. or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 - —
Paste, bbls., frt. alld lb. 1.55 - —
Peru balsam, dms lb. 1.06 - —
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American cns., dms lb. 2.45 - 3.20
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125- .11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .09125- .10375
tanks, refy. lb. .04875- —
Lily white, dms., c.l., refy. lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd. lb. .11125- .125
tanks, refy. lb. .06375- —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum)

Petroleum Products

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l. frt. alld. E lb. .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%) non-ret. dms., frt. alld E of Rockies lb. .16¾- —
non-ret. dms., c.l. same basis, lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., l.c.l., same basis, lb. .17½- —
tanks, same basis lb. .14½- —
39°C. or above, tar distilled, non-ret. dms., c.l., same basis lb. .18 - —
non-ret dms., l.c.l., same basis, lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l. frt. alld. lb. .16½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms., t.l., dlvd lb. .44 - —
fib. dms., t.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., l.t.l., same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb. 2.95 - —
100%, bots. lb 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb 1.25 1.75
dl-Phenylalanine, dms. works lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms. 200-lb. lots dlvd E. lb. 3.45 - —
fib. dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .41 - —
dms., l.c.l., dlvd. E lb. .42½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt. alld. lb. 1.10 - —
o-Phenylenediamine comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 - —
Tech., dms., works lb. 1.40 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .77 - —
Phenylethyl acetate bots. lb. 1.30 - 1.60
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms. lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld. lb. 1.50 - —
dms., smaller lots, frt. alld. lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots. lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E lb. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works, lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .23¾- .25
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
CP, bots., works lb.17.75 - —
Tech., fib dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret cyls., works lb .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —

Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, long-ton 5.16 - —
68-70%, b.p.l., bulk, c.l., same basis, long-ton 5.56 - —
70-72%, b.p.l., bulk, c.l., same basis, long-ton 6.21 - —
74-75%, b.p.l., bulk, c.l., same basis, long-ton 7.21 - —
76-77%, b.p.l., c.l., bulk, same basis, long-ton 8.21 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.52.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis, 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
Phosphorus, amorph., white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works lb. .14½- .15½
Solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1395- .1450
dms., l.c.l., works lb. .1550- .1650
Phosphorus sesquisulfide, dms., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .16½- —
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies lb 2.90 - —
Resinated, bbls., same basis lb. 2.73 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Pythalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls lb. 3.00 - —
Water dispersable, bbls lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43½
dms., l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b-Picoline, 98%, dms., t.l., works, lb. 1.05 - —
dms., l.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b.g-Picoline, 5°C. dms., c.l., works, lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, tanks, f.o.b., works lb. 1.50 - —
dms., t.l., same basis lb. 1.60 - —
Picric acid, NF, bbls. lb. .85 - —
Tech, bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.45 - —
Pilocarpine hydrochloride, USP bots oz. 5.25 - —
Pilocarpine nitrate, USP bots. vials, oz. 5.15 - —
Pimento, Jamaican, bgs lb. .68 - —
Mexican, bgs. lb. .57 - —
Pimento berry oil, NF, dms. lb. 3.75 - 9.25
Pimento leaf oil, crude, cns. lb. 2.10 - 2.40
Pine oil, dest.-dist., dms., l.c.l. works lb. .15 - —
dms., l.c.l. ex whse. New York, lb. .173 - —
Pine oil, steam-dist., dms., ex whse, New York lb. .185 - —
dms., dlvd. lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil)
Pinetar oil, coml., dms., c.l., works, lb. .0561- —
dms., l.c.l., works lb. .0634- —
dms., c.l., ex whse. New York, lb. .0745- —
tanks, works lb. .046 - —
Pinetar oil, NF, rectified, dms., incl., l.c.l., works, South, lb. .40 - —
dms., l.c.l., ex whse, New York lb. .41½- —
Refd., dms., incl., l.c.l., works lb. .35 - —
dms., incl. l.c.l., ex whse New York lb. .36½- —
Pink root, bls. lb. 1.75 - —
Piperazine, anhyd., dms., t.l., frt. alld lb. 1.60 - —
dms., l.c.l., same basis lb. 1.65 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.04 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld lb. 1.12 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more frt. alld lb. .77 - —
dms., t.t.l., same basis lb. .90 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more., frt. alld lb. .98 - —
Piperidine, dist., 98% min., dms., frt. equald lb. 2.60 - —
Piperonyl butoxide, dms. dlvd E. lb 4.50 - 5.05

Pitches

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works oz. 75.00 -80.00
Pleurisy root, bls. lb 45 - .50
Podophyllum resin, NF, dms. lb. 15.60 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-25-billion units, 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works, lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works, lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .26 - —
Nubs, bgs. lb. .37 - .40
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .20 - —
Danish, bgs. lb. .19 - —
Polish, bgs. lb. .20 - —
Turkish, bgs. lb. .17½- —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
dms., l.c.l., same basis, 100 lbs. 10.20 - —
Potash, solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
dms., l.c.l., works 100 lbs 9.75 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
USP, powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, dom., NF, gran. or powd., dms., c l lb .40 - —
dms., 5,000 lbs., 1 shipt lb. .40½- —
dms., smaller lots lb. .41 - .43
Imp., NF, gran. or powd., kgs. lb. .29 - —
Potassium borohydride, powd., dms., works lb. 16.00 - 22.00
Pelletized postassium borohydride $1.25 per lb. higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls dms lb. .20 - —
Potassium carbonate, dom., tech., powd., bbls., dms lb. .21 - .22
calcined bgs., c.l. works 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works, 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, crystal., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
works lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more, works, lb. .16¾- —
NF, gran. 25-lb. metal dms lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCL, bulk, c.l., works ton 27.00 - —
bgs., c.l. works ton 31.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, USP, gran., dms. lb. .43 - —
powd., dms. lb. .40½- .41¼
Potassium cyanide, dms 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999 lb lots, works, lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .63 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —

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Penola

Potassium Fluoborate—Red Precipitate

Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, dms. lb 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst., or gran., fib. dms lb. 1.40 - —
Potassium manure salt, 22% K₂O, bulk, c.l., works unit-ton .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .34½- .36½
bagged, 60% minimum K₂O, same basis ton.25.60 -27.80
Gran., bulk, c.l., works unit-ton. .35 - .37
bagged, 60% minimum K₂O, same basis ton.25.90 -27.10
Inside prices apply to material contracted for prior to July 1, 1958.
Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 - —
bbls., smaller lots ... 100 lbs.18.00 -19.00
NF, gran., bgs., 20-ton lots. 100 lbs. 9.50 - —
bgs., smaller lots .... 100 lbs.11.00 -12.00
NF, powd., bgs., 20-ton lots. 100 lbs.10.50 - —
bgs., smaller lots .... 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms lb. .32 - .34
Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms., ton lots, ex whse. .. ton.311.00 - —
dms., smaller lots, ex whse ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .26 - .29
USP, dms., works lb. .29¼- .31
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).

Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works. 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks, works 100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works 100 lbs.17.30 -18.15
bgs., l.c.l., works 100 lbs.17.80 - —
Potassium silicate, soln., 29° Be, 1:2.5, dms., c.l., works. 100 lbs. 4.95 - —
dms. l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt alld, E lb. .793 - .866
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .67½- .69½
Inside price applies to tonnage contracted for prior to July 1, 1958.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).

Potassium thiocyanate, NF, cryst., dms., works lb. .86 - .88
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., dms., f.o.b. works lb. .42½- —
dms., 5,000-lb. lots, same basis. lb. .43 - —
dms., smaller lots, same basis. lb. .43½ .49
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 —
fib. dms., l.c.l., works lb. .52½ .55
Potato starch (see Starch, potato).
Pregnenolone, bots. gram. No prices
Pregnenolone acetate, bots. gram. No prices
Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld lb 2.60 —
dms., 100-500 lb. lots lb. 2.95 3.15
Progesterone, USP, bots. gram. No prices.
Progesterone acetate, bots. gram. No prices.
Propane, indust., tanks, group 3 gal. .05 —
tanks, Baton Rouge gal. .05375- —
tanks, New York harbor (¼c. discount offered) gal. .1005- —
Propenyl guaethol, dms. lb.24.30 -27.00
Propionic acid, syn., pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¼- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. lb. .15½- —
tanks, dlvd. lb. .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., dlvd. E lb. .19 - —
tanks, dlvd. E lb. .15½- —
Psyllium seed, black, bgs. lb. .32 - .34
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- —
Pumice, imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs ton lots lb .04 - —
sun dried, coarse, bgs ton.60.00 - —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn. (see Allethrin)
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .48 - —
Powd., 1.3% pyrethrins, bags, ton, works lb. .69 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.35 - 9.45
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal.44.75 -45.25
Pyrethrum oleoresin, dewaxed, 20% dms., works lb.10.60 -10.95
purif., 20%, dms., works lb.10.60 -10.95
Pyridine, denat., dms. c.l., works and frt equald gal. 2.77 - —
dms. l.c.l., same basis gal. 2.80 - —
Refd., 2° non-ret. dms. l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots. 500-gram lots or more kilo.175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls. lb 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms. lb 3.50 - —
Pyroxylin, USP, bots. lb. 9.50 - —

Q

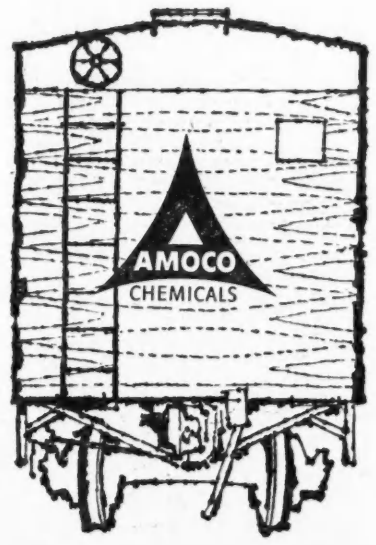
Quassia chips lb. .10 - —
Quercetin, fib. dms. kilo lots kilo.26.40 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.15 - 1.50
Quinidine sulfate, USP, cns oz. .74½- .77
Quinine, NF, cns., 100-oz. lots oz. .34 Nom.
Quinine bisulfate, USP, cns oz. .27½- .29
Quinine hydrochloride, cns oz. .289 - .304
Quinine sulfate, USP, cns oz. .27½- .29
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms. frt. alld., 100% basis lb. .88 - —
Powd frt. alld. 100% basis lb. .98 - —
Rapeseed oil, dms lb. .15¼- .15½
tanks lb. .13¼- —
Rare earth oxalate, 45-50%, bgs., works lb. 1.00 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

Red Pigments
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).



AMOCO PANAREZ RESINS

Here are five petroleum resins used in the manufacture of protective coatings, asphalt floor tile, rubber goods, shoe sole stock, adhesives, sealants.

PANAREZ RESINS TYPICAL INSPECTION DATA

PANAREZ Number	3-210	6-210	7-210	9-210	12-210
Type	Reactive	Reactive	Reactive	Reactive	Non-Reactive
Color Gardner—1933 Coal Tar	 10 —	 12 —	 — 7	 14 —	 17 —
Softening Point, °F.	210	215	210	210	210
Iodine Number, Wijs Method	227	147	160	170	85
Specific Gravity, 60/60°F.	1.05	1.11	1.09	1.10	1.05
Density, Lbs./Gal. @ 60°F.	8.75	9.22	9.09	9.16	8.78

PANAREZ Resins are available as solids in strippable steel drums of approximately 435 lbs. net. Also available in flake form in 50 lb. bags.

AMOCO CHEMICALS CORPORATION • 910 S. Michigan Ave., Chicago 80, Ill.

Reserpine, cryst., bots ..... gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77½- —
dms., l.c.l., same basis lb. .78½- —
USP, cryst.. dms.. works lb. 2.75 - —
powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb. 42.00 -46.00
Synthetic lb. 14.00 -16.00
Rhubarb root, India whole, bgs. lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 36.00 - —
USP, readily soluble, bots., dlvd. kilo. 130.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms. l.c.l. lb. .15½- —
tanks, dlvd. E lb. .13½- —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian bots oz. 72.00 - —
Turkish, bots. oz. 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms. lb. .97 - 1.20
tech., cns., dms. lb. .50 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13875- —
Rue oil, bots. lb. 2.75 - 3.00
Rutin, NF, fib dms., 10 kilo lots kilo. 13.75 - —
fib. dms., 5 kilo lots kilo. 14.00 - —
fib. dms., 1 kilo kilo. 14.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb. 2.50 - —
USP, gran., soluble dms., 1,000-lb. lots lb. 1.60 - —
dms smaller lots lb. 1.70 - 1.80
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots lb. 1.75 - 1.95
Safflower oil, dms., New York lb. .1785- .1825
tanks, Atl. Coast lb. .1585- —
Saffron, Mancha Superior, tins lb. 25.00 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb. 25.00 -32.00
Dalmatian, cns. lb. 3.60 - 4.00
Spanish, cns. lb. 1.35 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, crude, fib. dms., c.l., t.l., frt alld lb. .37¼- —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib. dms., c.l., t.l., dlvd lb. .39¼- —
fib. dms., l.c.l., dlvd. lb. .43½- —
USP, cryst., 200-lb. fib. dms., 1,000-lbs. or more lb. .50½- —
200-lb. fib. dms., less than 1,000 lbs lb. .53½- —
100-lb. fib. dms., 1,000-lbs. or more lb. .52½- —
100-lb. fib. dms., less than 1,000 lbs. lb. .55½- —
powd., 100-lb. fib. dms., 1,000-lbs. or more lb. .57½- —
100-lb. fib. dms., less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c per lb. higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs. lb. .65 - .66
powd., fib. dms lb. .75 - .76
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 - —
Sandalwood oil, cns. lb. 13.25 -14.50
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. lb. .40 - .78
Nat., dom., dms. lb. 1.55 - 2.15
Savin oil, USP, cns lb. 4.50 - 5.25
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Schaeffer's salt, powd., bgs., frt. alld,. 100% basis lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works. lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls. lb. 2.00 - 2.10
Senna leaves, Alexandria, whole and half, bls lb. .22 - —
siftings lb. .18 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 5.00 - 5.50
Sesame oil, USP, dms. lb. .38 - .39
Sesame seed, Columbian, bgs. lb. .15 - —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs. lb. .20 - —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs. lb. .13½- —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.

Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .36 - .39
lemon No. 2, bgs., 10-bg. lots lb. .33 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton. 25.00 - —
bgs., l.c.l., works, ex whse. ton. 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton. 20.00 - —
bgs, l.c.l., works ton. 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton. 15.00 - —
bgs., l.c.l., works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅛- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 3,000-oz. lots oz. .67¼- —
dm., 1,000-oz. lots oz. .67¾- —
bots., 250-500-oz. lots oz. .68¾- —
USP granular silver nitrate 4c. per oz. higher.

Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns. lb. 45.00 -60.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
liq., 73%, rayon type, sellers' tanks, works, dry basis. 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs., smaller lots, works 100 lbs. 2.80 - —

Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60%, gran., dms. c.l., works. lb .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd. dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l. dlvd. E lb 25½- —
bgs., l.c.l., dlvd E lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms., less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo lots kilo. 10.00 - —
dms., 10-kilo lots kilo. 10.35 - —
dms., 5-kilo lots kilo. 10.75 - —
dms., 1-kilo lots kilo. 11.00 - —
bots., 500-gram, bots. kilo. 11.50 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l, frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis. lb. .43 - —

HYDROGEN PEROXIDE'S WAYWARD ATOM...AND NAPOLEON

Hydrogen peroxide—one of Columbia-Southern's many products—has an oxygen atom that is constantly attempting to break away from its companions in the hydrogen peroxide molecule. Modern chemistry harnesses this restless atom and puts it to work as a bleach, to whiten cotton and wool, for better dyeing and coloring, and to whiten wood pulp, for better grades of paper.

And it all began with a disgusted emperor . . .

Napoleon's award of 3000 francs for significant scientific research had just been won by an Englishman—at a time when France was at war with England!

Additional funds for equipment to catch up with the British advances were quickly authorized. Using these expanded facilities, the French chemist Thenard discovered his "oxygenated water"—our hydrogen peroxide.

So thanks in part to the Little Corporal we enjoy white or brightly colored wool and cotton fabrics, and excellent grades of white paper. Columbia-Southern produces an extremely pure hydrogen peroxide for bleaching operations. In addition, Columbia-Southern is a major supplier of chlorine, caustic soda, and related products, used by practically every manufacturing and processing industry.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

A Subsidiary of Pittsburgh Plate Glass Company • One Gateway Center, Pittsburgh 22, Pennsylvania

Anhydrous Ammonia, Barium Chemicals, Benzene Hexachloride, Calcium Chloride, Calcium Hypochlorite (Pittchlor®, Pittabs®), Carbon Tetrachloride, Caustic Potash, Caustic Soda, Chlorine, Chlorinated Benzenes, Chloro-IPC, Chrome Chemicals, Hydrogen Peroxide, Muriatic Acid, Pacific Crystals, Perchlorethylene, Rubber Pigments (Calcene®, Hi-Sil®, Silene®), Soda Ash, Sodium Bicarbonate, Sodium Sulfate, Titanium Tetrachloride, Trichlorethylene

Sodium bicarbonate, USP, gran. bgs., c.l., works 100 lbs 2.95 - —
bgs., l.c.l., works 100 lbs 3.85 - —
USP, powd., bgs., c.l., works 100 lbs 2.55 - —
bgs., l.c.l., works 100 lbs 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms ¾c. per lb. higher
Sodium bifluoride, bbls. c.l. works, frt. equald lb. .19½ - —
bbls., l.c.l. same basis lb. .1990- —
Sodium bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs 3.50 - 4.10
Sodium bisulfite, anhyd., bgs. c.l., works 100 lbs 5.00 - —
bgs., l.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., works lb.33.00 - 40.00
Stabilized water soln. 12% $NaBH_4$, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l. works lb. .09 - —
dms., l.c.l., works lb .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb .05 - —
Sodium chlorite, tech. dms., c.l., works lb. .58 - —
dms., 20-dm lots or more works, lb. .66 - —
dms., smaller lots, works lb. .70 - 73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb .14¾- —
fib. dms. l.c.l., works lb. .15¼ .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., dms. lb. .62 —
NF VIII, gran., dms lb. 26½ 27½
USP XIV, gran., dms. lb. .29½ .30½
Sodium citrate, USP powd prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
dms. over 1,000-lb lots lb. .203 - —
dms., 100-lb to 1,000-lb lots lb. .213 - —
Gran sodium cyanide ic higher
Sodium cyclamate 100-lb dms lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid, 250-lb. dms., c.l., works lb. .18 - —
250-lb. dms., l.c.l., works lb. .18¾- —
Sodium diacetate, tech., 33-35% acetic acid, dms. l.c.l., works lb. .15 - —
250-lb. dms., l.c.l., works lb. .15¾ - —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½ - —
bgs., smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms. c.l., works, frt. equald lb. .1390- —
fib. dms. l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs. c.l. works. 100 lbs. 7.05 - —
bgs., l.c.l., ex whse. 100 lbs. 8.65 - —
Sodium gentisate, 100-lb fib dms.lb 5.50 - —
Sodium gluconate, refd. dms. lb .84 - —
Tech. dms., bgs. lb. .37 - .39
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b shipping point lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis.lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite dms. c.l., frt. alld lb. .22½- —
dms., l.c.l., frt. alld. lb. .24¾- —
Sodium hydroxide, NF pellets, 100-lb dms. 1 to 100-dm lots. lb. .23½ .28
Sodium hydroxide tech (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms lb. 1.98 - —
Sodium lactate, edible, 60%, cbys., dms. works lb. .26½- —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium metabisulfite (see Sodium bisulfite).
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs. 4.40 - 7.00
Sodium metaborate octahydrate, gran., bgs., c.l. works.ton.102.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots ex whse. 100 lbs. 9.25 -11.25
Sodium metaborate, tetrahydrate, bgs., c.l. works ton.210.00 - —
bgs., ton lots, ex whse 100 lbs 13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 -17.18
Sodium, metallic, bricks, c.l. works, lb. .21 - —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls. frt alld. lb. .62 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb lots, works. 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs 4.80 - 6.75
dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls., lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton.45.50- —
bulk, c.l., works ton.41.50 - —
Imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.45.50 - —
bulk, c.l., same basis ton.41.50 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs.11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l. works. 100 lbs. 5.05 - —
bbls, l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs.12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenolsulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Sodium phosphate, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .20½
Sodium phosphate, monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., l.c.l. same basis 100 lbs. 9.40 -10.00
Sodium phosphate, tribasic, anhyd., bgs., c.l. frt. equald. 100 lbs 9.05 - —
bgs., l.c.l. frt. equald.100 lbs. 9.45 -10.05
cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.60 - —
bgs., l.c.l., frt equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt. equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt equald. 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 -12.35
Sodium pyrophosphate, terric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs. 7.81 - —
bgs., l.c.l. same basis 100 lbs. 9.21 - 9.71
Sodium salicylate, USP dms., 1,000-lbs or more lb. .78½- —
dms., less than 1,000 lbs dms.lb. .81½- —
Sodium sesquicarbonate, ogs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs 4.10 - 4.35
dlvd zone 2 100 lbs 4.35 - 4.60
dlvd. zone 3 100 lbs 4.75 - 4.90
dlvd zone 4 100 lbs 5.35 - 5.60
Sales zones are: (1) Atl states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex E of 100°; S. of 31° Fla.; also Me., N. H. and Vt in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark E of 98° Ga.; Iowa (except Davenport) Minn Mo (except St Louis) Neb E. of 98° N. C., S C., Tenn and Tex. N of 31° and E of 100° (except Wichita Falls); also Ala. La. and Miss. No of 31°; (3) Ark W of 98°, Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso Tex.
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb lots, works. 100 lbs. 5.35 - —
Sodium sesquisilicate, hydrated, dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, turbid, 1:3.2, dms., c.l., works. 100 lbs. 1.55 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
Sodium silicate, liq., 47° Be., turbid, 1:2.9, dms., c.l., works. 100 lbs. 2.25 - —
dms., l.c.l. works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. turbid, 1:2.4, dms., c.l., works 100 lbs 2.65 - —
dms., l.c.l., works 100 lbs 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .069 - —
Sodium silicofluoride in dms. 0.4c. per lb higher.
Sodium stannate, dms., works, frt. alld. E lb. .652 - .712
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls. works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E ton.54.00 - —
detergent, rayon grade, bgs., c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt. equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Tech. bgs., c.l., works 100 lbs. 3.50 - —
bgs. t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd. dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Sodium thiosulfate, tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 8.20 - —
100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 8.60 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald lb. .0820- —
64-lb. bgs., l.c.l., t.t.l., frt. equald lb. .0860- —
Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. 5.25 - —
100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 5.50 - —
Sodium titanate, ctns. c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb. dms., c.l., frt. alld E. lb. .35 - —
50-lb dms., c.l., frt. alld E lb. .35½- —
10-lb cns., c.l., frt alld E. lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs. 8.18 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs.10.20 -10.60
Sodium tungstate, tech. kgs dlvd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb lots or more works lb. .28 - —
fib., dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, aromatic 312°-365°F, b.r., 17.2°C. m.a.p., tanks, New Jersey gal. .31 - —
315°-350°F, b.r., 17.2°C. m.a.p., tanks, Texas City gal. .35 - —
342°-351°F, b.r., 15°C, m.a.p., tanks, Baytown, Texas gal. .29 - —
324°-349°F, b.r., 16.5°C, m.a.p., tanks, Houston gal. .32 - —
322°-350°F, b.r., 17.2°C, m.a.p., tanks, Baytown, Tex. gal. .29 - —
352°-413°F, b.r., 17.5°C, m.a.p., tanks, Houston gal. .32 - —
365°-404°F, b.r., 19°C, m.a.p., tanks, New Jersey gal. .32 - —
367°-421°F, b.r., 20°C, m.a.p., tanks, Baytown, Tex. gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 205°-282°F, b.r., 38°C, m.a.p., tanks, New Jersey gal. .24 - —
211°-277°F, b.r., 25.6°C, m.a.p., tanks, New York, New Jersey gal. .28 - —
221°-278°F, b.r. 34.8°C, m.a.p., tanks, Houston gal. .20 - —
282°-325°F, b.r., 41.6° C, m.a.p., tanks, Houston gal. .25 - —
357°-403°F, b.r., 34°C, m.a.p., tanks, Houston gal. .26 - —
358°-401°F, b.r., 24.4°C, m.a.p., tanks, New Jersey gal. .38 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib dms., 20,000-lb lots works lb. .34 - —
fib dms., 10,000 to 20-000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works, lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms., ton lots, works lb. .16¾- —
dms., smaller lots, works lb. 17 - —
tanks, works lb. .15 - —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23½- —
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20½- —
Soybean meal, 44%, bulk, Decatur, ton.53.00 - —
Soybean oil, crude, tanks, Decatur, lb. .09½- —
Foots, soapstock, acid 95%, tanks, lb. .06¾- —
Refd., alkali, dms. lb. .1380- .1405
tanks lb. .1180- —
Clarified, dms. lb. .1330- .1355
tanks lb. .1130- —
Salad, dms. lb. .1370- .1395
tanks lb. .1170- —
Soybean oil acids, dbl. dist., dms., lb. .18 - .20½
tanks lb. .15½- —
S. D., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Sparteine sulfate, cns. oz. .80 - —
Spearmint leaves, dom., bls. lb. .75 - —
Spearmint oil, NF, dms. lb. 5.10 - 6.10
Sperm oil, bleached, winter, 45°, dms. lb. .1450- .1550
tanks lb. .1250- —
Nat., winter, 45°, dms. lb. .1350- .1450
tanks lb. .1150- —
Spermaceti wax, blocks, cs. lb. .31 - .34
Cakes, cs. lb. .32 - .34
Spruce oil cns., dms. lb 2.10 3.55
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .822 - .844
Stannic oxide, dms., dlvd. lb. 1.11 - 1.12
Stannous chloride, anhyd. dms., works lb. 1.02 - 1.274
Stannous chloride, hydrous, cryst., dms., works lb. .88 - .89
Stannous sulfate, dms., works lb. 1.073 - 1.093
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs. lb. .60 .61
Stearic acid, dbl., pressed, bgs lb. .16¾- .19¼
Single-pressed, bgs. lb. .16¼- .18¾
Triple-pressed, bgs. lb. .18½- .21
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3 gal. .12375- —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
Stoddard solvent, petroleum, tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs lb. .15 - —
Streptomycin hydrochloride, bulk, gram. .037 - .038
Streptomycin sulfate, bulk gram. .037 - .038
Strontium bromide, NF, cryst., 150-lb. fib. dms lb. .84 —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots. lb 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots. oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 - 3.75
Styrax gum, USP, cs lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l. frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l lb. .145 - —
dms., l.c.l., same basis lb. .165 - —
tanks, bulk, same basis lb. .12 - —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.
Styrolyl acetate, bots. lb. 1.25 - 1.45
Succinic acid, purit., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy E. lb. .0905- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80-lb ctns., works lb. .65 - .75
80-lb ctns., spot lb. .67¼- 72¼
Sulfabenzamide, dms. kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib dms. kilo. 7.70 - 8.80
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms. kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo.24.80 25.90
Sulfaguanidine, NF X, dms. kilo 5.50 - 6.60
Sulfamerazine, USP, microcrystals, dms kilo.23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 -25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 -20.75
USP XV, powd., dms kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 - —
dms., l.c.l., t.t.l., works 100 lbs.17.50 -18.50
100 lbs. or more lb 6.00 - —
Gran., dms. c.l., t.l., works. 100 lbs.14.75 - —
dms., l.c.l., t.t.l., works 100 lbs.16.25 -17.25
Sulfanilamide, NF X, 30-80 mesh, dms kilo 3.05 - 3.50
NF X, microcrystals, dms. kilo. 3.79 - 4.20
NF X, powd., dms. kilo. 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary, dms kilo.16.28 - —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld. lb. .23 - —
Sulfapyridine, USP XV, powd., bots. tins kilo.15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.55 -17.65
Sulfathiazole, NF X, powd., dms. kilo. 5.50 - 5.85
NF X, microcrystals, dms. kilo. 6.25 - 6.60
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 - —
Export, f.o.b. vessels Gulf ports long-ton.25.00 - —
US and Canada, f.o.b. vessels Gulf ports, long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, bulk, imp., Mexican, filtered, f.o.b., vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.15 - —
bbls., mines 100 lbs. 6.50 - —
flour, light, bgs., mines 100 lbs. 4.75 - —
bbls., mines 100 lbs. 5.75 - —
lump bgs., mines 100 lbs. 4.45 - —
rolls, bgs., mines 100 lbs. 5.00 - —
bbls., mines 100 lbs. 5.75 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —

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U.S.I. CHEMICAL NEWS

June ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1959

Growing Market Is Seen For Phosphoric Acid as Fertilizer Raw Material

In a recent article in Farm Chemicals Magazine, Lawrence Byck – U.S.I. Manager of Heavy Chemical Sales – discusses the value of wet-process phosphoric acid as an agricultural chemical raw material. Phosphatic Fertilizer Solution (PFS) has been an intermediate in triple superphosphate production for many years, but its use as a raw material for fertilizer generally dates back only to 1957.

According to Mr. Byck, the usefulness of PFS depends on these factors:

(1) It is the only commercial source of P_2O_5 in liquid form. Dusting and massive solids handling problems are eliminated.

(2) It is by far the most highly acid source of P_2O_5 commercially available.

(3) It is the most concentrated commercial source of P_2O_5 – 52-54%.

(4) It may or may not be a markedly economical source of P_2O_5, depending on consumer location.

Given these factors, says Mr. Byck, here are some of the things PFS can do for the mixed fertilizer industry:

• Neutralize large quantities of ammonia, because of high

MORE

New Commercial Route to Copper Strip Starts with Ammonia Leaching of Scrap

Copper strip can now be made commercially from a powder which is derived from copper scrap by chemical means. Scrap is leached with ammonia, and reduced to copper powder with hydrogen gas at 375° F and 1,200 psi.

Via a specially developed process and related equipment, the powder is roll-compacted into strip that is sintered at 50-100°F below its m.p. under a hydrogen atmosphere. The strip is then rolled and annealed to specification.

Sodium Addition Improves Properties of Alloy

Recent tests have indicated that metallic sodium, added in small quantities to aluminum 356, improves ductility and the already fine mechanical properties of this casting alloy. As little as 0.02 to 0.04% seems to do the job. Above about 0.04%, additional sodium causes fluidity loss and increased porosity, with an accompanying loss of mechanical properties.

Aluminum 356, used extensively in industrial, aircraft and missile service, contains about 7% silicon and 0.3% magnesium. The silicon crystals are large and needle-shaped, which tends to make the structure relatively brittle. Sodium refines the crystals to a small, finely dispersed form to improve alloy properties.

In the tests, sodium bricks were added by immersing them in the molten alloy wrapped in aluminum foil. The foil gradually melts and allows the sodium below the surface of the molten alloy, to do its work.

Missiles and Rockets, Fast Growing Market for Chemical Materials and Research

Propellents, Lubricants, Plastics, Nonferrous Metals Among Materials Researched, Developed and Supplied by the CPI.

It is estimated that more than 25% of the $4-billion-plus government expenditure for missiles and rockets, in the fiscal year just ending, went to the chemical industry for materials, research and development. For the fiscal year starting July 1, total government expenditures for this program are expected to be about 30% greater, with the chemical industry's share possibly even higher than in 1958-1959. The U. S. space and weapons program is becoming a larger and larger factor to chemical manufacturers.

Structural Materials Largest Market

Where does the CPI fit into this vast undertaking? Structural materials are of course the greatest contribution in terms of tonnage and of dollars. Practical materials must be found to withstand temperatures as high as 7,000°F. Strength must be high. Weight must be kept down. The chemical industry is working on answers – evaluating nonferrous metals and alloys, ceramics, organic and inorganic polymers, graphites – developing new compounds, new techniques, new combinations.

Nonferrous Metals Used or Proposed For Structures in Missiles & Rockets

Aluminum	Nickel
Beryllium	Silver
Cadmium	Tantalum
Chromium	Tin
Cobalt	Titanium
Columbium	Tungsten
Copper	Zinc
Magnesium	Zirconium
Molybdenum	

Non-Metal Materials Used or Proposed For Structures in Missiles & Rockets

Alkyds	Aluminum Oxide
Epoxies	Glass
Fluorocarbons	Graphite
Phenolics	Nickel Molybdate
Polyamides	Silicon Carbide Cpds.
Polybutadienes	Thorium Oxide
Polyesters	Zirconium Boride
Polysulfides	Zirconium Oxide
Silicones	Other Ceramic Oxides
Urethanes	

Along with combinations of metals and ceramics (ceramets), researchers have recently proposed metal-ceramic-plastic "alloys" which, if practical, might make the ideal rocket materials.

Propellents Greatest R&D Challenge

Propellent procurement is rather small since, of course, propellents are actually used only during firings. But the research effort in this area is enormous. The reason: none of the materials evaluated to date completely answer the requirements of the ideal propellent.

Liquid systems, on the one hand, are complex, and many of the component materials have the disadvantages of corrosiveness, toxicity, low density and, for ballistic purposes, poor storage life. However, liquids are relatively easy to control and, most important, have high specific impulse.

Solid systems, on the other hand, present problems of their own. Combustion control is difficult. Component materials need better physical properties such as flexibility and thermal expansion coefficients. Most important, they are low in specific impulse compared to liquids. But solid systems are reliable, comparatively simple equipment-wise, and can be fired easily on short notice.

In consequence, both types of systems are under intensive investigation, but with the emphasis on solids growing.

MORE

Liquid Propellent Materials, Used or Under Consideration

FUELS	OXIDIZERS
Alcohols	Chlorine Trifluoride
Alkyl Boranes	Fluorine
Amines	Hydrogen Peroxide
Aniline	Liquid Oxygen
Ammonia	Nitric Acid
Cyanogen	Nitrogen Tetroxide
Hydrazine	Oxides of Nitrogen, Other
Hydrogen	Oxygen Difluoride
Hydrogen Cyanide	Oxygen Fluoride
Kerosene	Ozone
Unsymmetrical Dimethyl Hydrazine (UDMH)	MONOPROPELLENTS Ethylene Oxide Hydrogen Peroxide

Solid Propellent Materials, Used or Under Consideration

FUELS	
Boron-Based Compounds Containing Metals Like	Polyethylenes
Aluminum	Polyurethanes
Beryllium	Polysulfide Rubbers
Magnesium	OXIDIZERS
Resins such as	Ammonium Nitrate
Acrylics	Potassium Nitrate
Butadiene-Vinyl Pyridine	Ammonium Perchlorate
Cellulosics	Potassium Perchlorate
Epoxies	Lithium Perchlorate
Phenolics	DOUBLE-BASED
Polyamides	Nitrocellulose
Polyesters	Nitroglycerine

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June ★ # U.S.I. CHEMICAL NEWS ★ 1959

CONTINUED

Missiles

Many Other Types of Materials Needed

The chemical industry also supplies to the missile field materials such as lubricants, hydraulic fluids, pressurizing gases, and plastics and rubbers for seals and gaskets and protective clothing. Of particular interest is the research work in progress on synthetic lubricants to supplement the mineral-based varieties. Among the compounds under investigation are included fluorine derivatives, diester derivatives, phosphorus-boron combinations, tin-silicon compounds, silicones and alkyl silanes.

U.S.I. Contributes in Several Areas

Because of its diversified interests in chemicals, plastics and nonferrous metals, U.S.I. contributes to the vital space and weapons program both directly and indirectly. Through ⅓ ownership of Mallory-Sharon Metals, U.S.I. supplies zirconium, titanium in commercial quantities, tantalum and columbium in pilot quantities. Polyethylene, made by U.S.I., is among the resins under investigation in solid propellent fuels. Another U.S.I. product, ISOSEBACIC® acid, may be used as an intermediate for the polyurethanes studied for the same purpose, as well as for diester bases in synthetic lubricants. U.S.I. makes ethyl alcohol, long used in liquid propellent systems. AFN, Inc., 25% owned by U.S.I., has a government research contract on boron-based fuels. And in a joint venture with Food Machinery, dimethylhydrazine-type fuels are being studied.

CONTINUED

Phosphoric

acidity — an important advantage.

• Allow formulation of high-analysis grades — a strong trend in the industry — because of high concentration.

• Granular goods are growing in popularity. PFS formulations generally give more rugged granules — better suited to subsequent handling — without adding granulation aids.

In summation Mr. Byck notes that because of transportation costs, PFS will probably be uneconomical in many areas. But in many more of the important agricultural areas, it is becoming the product of choice for reasons of product quality, overall costs and adaptability to process needs.

Faster Analysis Developed For Halogens in Organics

A researcher at the Texas Agricultural Experiment Station has worked out an improved method of the quantitative determination of halogens in organic materials. It is said to be faster, cheaper than previous techniques.

In a typical analysis, the chemist would weigh a sample containing about one milliequivalent of chlorine into a beaker, add excess ammonia to dissolve and chill the sample, and ethyl ether to insure that the sample stays in solution. Chlorine is then reduced to chloride with about half a gram of metallic sodium. Appearance of a blue color indicates complete reduction, which takes only about two minutes.

Ammonia and ether are evaporated, excess sodium combines with water vapor to yield sodium hydroxide, and the blue color disappears. Nitric acid is used for neutralization, and the chloride is titrated with silver nitrate.

As little as ten minutes of the chemist's full attention is devoted to a single analysis, and several analyses can be conducted simultaneously. Error is rarely higher than 3%.

New Extraction Process Purifies Many Elements

A new extraction process for purifying a large number of elements, including many not usually subject to extraction processes, is described in USP 2,874,176 issued recently. By this technique, elements can be separated selectively from an aqueous solution containing a mixture of elements.

Here is how it works. The various elements in the solution are reacted with an alkali metal salt of perfluorocarboxylic acid. From the resulting compounds in solution, the desired compound is selectively extracted with a substantially immiscible polar organic solvent such as an alcohol, ether, ketone or phosphate.

Extraction is reported to depend on a number of variables: chain length of acid, valence of cation, organic solvent, molar ratio of cation to reagent, ion size, complexing ability of cation and pH. For example, uranyl and vanadyl ions extract together at pH 2, but at pH 1.65, only uranyl ion extracts.

After separation of the desired element, the reactions can be easily reversed so that the element is once more in aqueous phase and the reagents are recovered.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Identification reagent for synthetic fibers, as well as for animal and vegetable fibers, can now be obtained. Claimed to give reliable identification in minutes by imparting distinct colors to different fibers. **No. 1480**

New economical corrosion inhibitor for aqueous recirculating systems combines sodium molybdate with orthophosphate. Combination claimed to be synergistic — effective as the molybdate alone but at greatly lowered cost. **No. 1481**

Automatic recording titrator now on market is designed to make variable and constant pH measurements automatically. Simultaneously provides permanent record. Titrant delivery rate and chart speed are both variable. **No. 1482**

Corrosion and spotting preventive for all metals, recently developed, is added to hot water rinses. Said to promote spot-free drying, and to leave an invisible film which protects against tarnish and corrosion for months. **No. 1483**

Volume I of new series of publications on advances in inorganic and radiochemistry can now be purchased. 449-page book contains sections on boron hydrides, lattice energies, activation analysis, phosphonitrilic halides, etc. **No. 1484**

Commercially-pure titanium anode hooks and baskets, designed to meet need for high corrosion resistance in nickel and chrome plating operations, are now on market. Said to have indefinite life in highly corrosive mixtures. **No. 1485**

Selective reductions of organic compounds with complex metal hydrides are discussed in new brochure now available. This review of published literature covers types of reactions possible, includes bibliography. **No. 1486**

Polyethylene aspirator pump now on market cannot corrode; said to perform as capably as metal aspirators, operate efficiently on all water pressures from 11 pounds up. Recommended for highly corrosive filtrates. **No. 1487**

Physical and thermodynamic properties of many commonly-used elements and compounds are covered in new brochure offered by catalyst maker, to aid in catalyst selection when factors of equilibrium, heat exchange, etc. are vital. **No. 1488**

Thorium technology is discussed in series of papers now bound in 397-page volume and offered for sale. Topics include melting, refining, structure, properties, fabrication, corrosion, production of compounds. **No. 1489**

PRODUCTS OF U.S.I.

Alcohols: Ethyl (pure and all specially denatured formulas); Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL PR.

Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, Diethyl Carbonate, DIATOL®, Diethyl Oxalate, Ethyl Ether, Acetone, Acetoacetanilide, Acetoacet-Ortho-Chloranilide, Acetoacet-Ortho-Toluidide, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate, ISOSEBACIC® Acid, Sebacic Acid, Urethan U.S.P. (Ethyl Carbamate), Riboflavin U.S.P.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Riboflavin USP, Intermediates.

Heavy Chemicals: Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Caustic Soda, Chlorine, Metallic Sodium, Sodium Peroxide, Sodium Sulfite, Sodium Sulfate.

PETROTHENE® Polyethylene Resins

Animal Feed Products: Antibiotic Feed Supplements, BHT Products (Antioxidant), Calcium Pantothenate, Choline Chloride, CURBAY B-G®, Special Liquid CURBAY, VACATONE®, Menadione (Vitamin K_3), DL-Methionine, MOREA® Premix, Niacin USP, Riboflavin Products, Special Mixes, U.S.I. Permadry, Vitamin B_{12} Feed Supplements, Vitamin D_3, Vitamin E Products, Vitamin E and BHT Products.

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Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

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ulfur, rubbermakers, coml., reg., bgs., mines..100 lbs. 2.45 - —
bbls., mines .....100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines..100 lbs. 2.55 - —
bbls., mines .....100 lbs. 3.80 - —
refd., bgs., mines.....100 lbs. 4.40 - —
bbls., mines .....100 lbs. 5.55 - —
treated, 2.5% mineral oil, bgs., mines..100 lbs. 2.75 - —
bbls., mines .....100 lbs. 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½- —
ret. dms., l.c.l., same basis....lb. .05¼- —
tanks, same basis.....lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works....lb. .0535- —
tanks, works .....lb. .045 - —
Refrigeration, 150-lb. cyls., dlvd. lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½- —
dms., l.c.l., same basis .....lb. .05¼- —
tanks, same basis .....lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works.....100 lbs. 2.30 - —
tanks, works .....ton.18.60 - —
66° Be, cbys., c.l., works. 100 lbs 2.25 - —
cbys., l.c.l., works .....100 lbs. 2.55 - 3.35
tanks, works .....ton.22.35 - —
98%, tanks, works.....ton.23.50 - —
99%, tanks, works .....ton.23.70 - —
100%, tanks, works.....ton.23.95 - —
Sulfuric acid, CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works .....ton.29.00 - —
65%, tanks, works .....ton.39.50 - —
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b., vessel unit-ton. 1.02 - —
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .93 - —
Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns. .....lb. 2.00 - 3.05

T

2,4,5-T, dms., c.l., works frt. equald, lb. 1.18 - —
dms., l.c.l., same basis .....lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works .....lb. 1.29 - —
Talc, dom., fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
bgs., l.c.l., works .....ton.31.00 -36.00
fibrous, New York, 99.5%, 325 mesh bgs., c.l., works. ton.31.00 - —
bgs., l.c.l., works .....ton.34.00 - —
Talc, dom., fibrous, 99.95% micronized, bgs., works ton.38.00 - —
ord., Calif., gran., bgs., c.l., works ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works .....ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04¼- .04½
tanks, works .....lb. .02¾- .03
Dist., dms., c.l., works.....lb. .07¾- —
dms., l.c.l., works .....lb. .08 - .08½
tanks, works .....lb. .06 - .06½
Refd., dms., c.l., works .....lb. .06¾- —
dms., l.c.l., works.....lb. .07 - .07½
tanks, works.....lb. .05½- .06
Tall oil acids, dms., c.l., works..lb. .09 - .12
dms., l.c.l. .....lb. .09½- .12½
tanks, works .....lb. .07 - .10
Tallow, edible, tanks, dlvd. .....lb. .08½- .08¾
Inedible, fancy, bleachable, tanks, dlvd..lb. .06⅞- .07
fancy, guaranteed, dms., f.a.s. lb. .0845- —
No. 1, tanks, dlvd.....lb. .06⅜- .06½
prime, tanks, dlvd.....lb. .06¾- .06⅞
special tanks, dlvd.....lb. .06⅜- .06¾
sulfonated 25% bbls., l.c.l...lb. .08⅜- .08⅞
50%, bbls., l.c.l.....lb. .10½- .11
Tallow acids, dist., dms.....lb. .14¼- .16¾
tanks .....lb. .11¾- —
Hydrogenated, dms. .....lb. .15¾- .18¼
Tallow oil, acidless, dms., c.l. ..lb. .14½- —
dms., l.c.l. .....lb. .15½- .17
Tangerine oil, Florida, dms. .....lb. 3.10 - 4.00
Tankage, animal, feeding, 9-11% ammonia, New York bulk. unit-ton. 6.00 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk. unit-ton. 6.50 - —
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots .....lb. 2.06 - 2.07
NF, powd., bbls., 1,000-lb. lots .lb. 1.95 - —
bbls., smaller lots.....lb. 1.96 - 1.99
Tech., dms. .....lb. 1.05 - —
Tansy oil, dms. .....lb. 7.50 - 9.50
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½- —
dms., l.c.l., same basis .....gal. .55½- —
tanks, same basis .....gal. .43½- —
25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis.....gal. .62 - —
tanks, same basis .....gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis .....gal. .77 - —
tanks, same basis.....gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, dom., NF, 230 or 250-lb. dms., c.l lb. .49 - —
230 or 250-lb dms., 10,000-lb. lots, l shipt lb. .49½- —
230 or 250-lb. dms., smaller lots lb. .50 - —
100-lb. dms. .....lb. .51 - —
Imp., NF, bgs., dms., kgs. ...lb. .40 - .41
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms. .....lb. .50 - .60
Prime, dms. .....lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. .....lb. .53 - 56
Terpinyl propionate, dms. .....lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. .....gram. No prices.
Testosterone proprionate, USP. gram. No prices.
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works .....lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., l.c.l., dlvd. E .....lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald..lb. .75 - —

Tetraethylenepentamine, dms., c.l., dlvd. E..lb. .53½- —
dms., l.c.l., dlvd. E. .....lb. .55 - —
tanks, dlvd. E. .....lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld..lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works. lb. .36½- —
dms., l.c.l., or l.t.l., works ... lb. .37 - —
tanks, works .....lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., l.c.l., Memphis, Tenn..lb. .32½- —
dms., c.l., t.l., Newark, N.J..lb. .33½- —
dms., l.c.l., Newark, N.J.....lb. .34½- —
tanks, dlvd. E. of Denver.....lb. .31 - —
tanks, dlvd. W. of Denver.....lb. .32 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd. .....lb. 7.50 -10.00
Thallium sulfate, 99% bots., dlvd. lb. 5.00 -10.00
Theobromine, NF, fib. dms. ...lb. 4.50 - —
Theobromine and sodium acetate, USP, fib dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb. 3.90 - —
Theophyline, anhyd. or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, reg., fib. dms kilo.36.00 - —
USP, ampule grade, fib. dms.kilo.38.00 - —
Thiamine mononitrate, USP, fib. dms kilo.36.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots .....lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works. lb. 6.20 - —

Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis... lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots. kilo.275.00 - —
Thyme leaves, French, bgs.....lb. .29 - —
Spanish, bgs. .....lb. .14 - —
Thyme oil, NF red, cns., dms lb 2.00 - 2.25
USP, white, cns. .....lb 2.20 - 2.60
Tech., white, cns. .....lb .40 - 1.85
Thymol, fib. dms. .....lb. 2.60 - 3.00
Thymol iodide, NF, dms. ..... lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (straits) .....lb. 1.04 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd .....lb. .26½- —
reg., bgs., c.l., dlvd.....lb. .25½- —
bgs., l.c.l., dlvd.....lb. .26½- —

Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton.180.00 - —
bgs., 5-ton lots Niagara, Falls, N.Y ton.205.00 - —
bgs., ton lots, same basis. ton.215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E .....lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs., l.c.l., works lb. .09⅞- —
Titanium dioxide-calcium pigment, 50% Ti O_2, high-tinting dms. c.l. lb. .14⅜- —
dms., l.c.l. .....lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works .....lb. .27½- .29
tanks, works .....lb. .20 - —
Tobias acid, dms., c.l., t.l..... lb. .78 - —
dms., l.c.l. .....lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis, bots kilo.67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 - —
dl-a-Tocopherol, bots.....kilo.99.00 - —

in catalysts

in paints

in ceramics

in plastics

in inks

VANCORAM CHEMICALS

in synthetic fibers

in petroleum products

in glass

in mordants...

In these and many other applications Vancoram Vanadium Chemicals are growing rapidly in importance, because of their dependability and versatility.

You Can Depend On...

VANCORAM AMMONIUM METAVANADATE
(Technical Grade)
Analysis: NH_4VO_3—99% min.

VANCORAM VANADIUM PENTOXIDE
(Technical Grade—Air-dried)
Analysis: V_2O_5—83/86%
(Technical Grade—Fused Flake)
Analysis: V_2O_5—88/92%
(Purified Grade)
Analysis: V_2O_5—99.6% approx.
(C. P. Grade)
Analysis: V_2O_5—99.9% approx.

VANCORAM SODIUM ORTHOVANADATE
(Technical Grade—$Na_3VO_4 \times H_2O$)
Typical analysis: V_2O_5—approx. 26.75%
Na_2O—approx. 22.60%

VANCORAM SODIUM METAVANADATE
(Technical Grade)
Typical analysis: V_2O_5—61.40%
Na_2O—20.90%

VANCORAM CHLORIDE—Syrupy—C.P.
Analysis: $V_2O_2Cl_4 \cdot 5H_2O$—approx. 82.00%

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dl-a-Tocopheryl acetate bots.. kilo 90.00 — —
25% dry. powd., bots ..... kilo 22.50 -24.00
33% dry. powd., bots. .... kilo 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 — —
Paste, kgs., 100% basis .... lb 1.50 — —

Toluol

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb 1.50 — —
Tolu balsam, cns ..... lb. 3.10 - 3.60
Toluene coaltar indust., or nitration tanks, dlvd E of Rockies gal. .25 —
Toluene, petroleum indust tanks, dlvd E of Rockies gal .25 .32
p-Toluenesulfonamide powd., dms., t.l., works lb. .60 — —
dms., l.t.l., same basis lb. .63 — —
Toluenesulfonic acid, dms., c.l., t.l. works lb. .17 — —
dms., l.c.l. works lb. .18 — —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 — —
dms., 125 lbs. to t.l. lb. 1.00 — —
m-Toluidine, dms. c.l., works, frt. alld lb. .79 — —
dms., l.c.l., same basis lb. .80 — —
tanks, same basis lb. .78 — —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 — —
dms., l.c.l., same basis lb. .31 — —
tanks, same basis lb. .28 — —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 — —
Cast, dms frt. alld lb. .45 — —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 — —
Light shades, kgs., works lb. 1.70 — —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb 1.10 —
Tonka beans, Angostura, cks. .. lb. 1.50 - 1.60
Brazilian, Surinam, cs. ..... lb. 1.25 - 1.30
Totaquine 100-oz. lots, cns. ..... oz. .42 —
Toxaphene, dms., c.l., t.l., works. lb .22 — —
dms., l.c.l., t.l., works .... lb .28 — —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs ..... lb. 3.40 - 3.60
No. 3, cs ..... lb. 3.15 - 3.25
USP, powd., bbls. ..... lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E of Rockies lb. .39 — —
dms., l.c.l., same basis lb. .40 — —
tanks, same basis lb .37 — —
Triallylamine, dms., c.l., dlvd. . lb .985 — —
dms., l.c.l., dlvd. ..... lb. .995 — —
tanks, dlvd. ..... lb. .96 — —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver, lb. .42½- —
non-ret dms., l.c.l., frt. allid. E. of Denver lb. .43½- —
tanks, frt. allid E of Denver lb. .40 — —
Tributyl phosphate, dms. c.l., works. lb. .52½- —
dms., l.c.l., same basis. lb. .53½- —
tanks, same basis lb .50 — —
Tributylamine dms., c.l., works lb .67½- —
dms., l.c.l., same basis ..... lb. .69 — —
tanks, same basis. ..... lb .65 — —
Trichloroacetic acid, bots. ..... lb. 2.00 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 — —
dms., l.c.l., frt. allid E ..... lb. .16 — —
tanks, frt. allid. E. ..... lb. .13¼ — —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. ..... lb. .16¼- —
tanks, dlvd. ..... lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E. ..... lb. .14¼- —
tanks, works ..... lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt equald lb. .13 — —
dms., l.c.l., frt allid ..... lb. .15 - .16¾
tanks, works, frt. equald. ..... lb .12 — —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys works, frt adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 — —
dms., l.c.l., dlvd. ..... lb. .36 — —
tanks, dlvd. ..... lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. ..... lb. .34½- —
dms., l.c.l., dlvd. ..... lb. .35½- —
tanks, dlvd. ..... lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E ..... lb. .28 — —
tanks, dlvd. E ..... lb. .24 — —
Triethanolamine dms. c.l. dlvd E. lb. .24½- —
dms., l.c.l., same basis ..... lb. .25½- —
tanks, same basis ..... lb. .22 — —
Triethanolamine (lauryl) sulfate, dms., c.l., t.l., frt. allid lb. .25½- —
dms., l.t.l., frt. allid. ..... lb. .26½- —
tanks, frt. allid ..... lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 — —
dms., l.c.l., same basis ..... lb. .51½- —
tanks, same basis ..... lb. .47½- —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt allid E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. allid. E of Denver lb. .47¼- —
tanks, frt allid E of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. ..... lb. .41½- —
tanks, dlvd. ..... lb. .38 — —
Triethylene glycol, dms., c.l. dlvd. E lb. .21 — —
dms., l.c.l., dlvd. E. ..... lb. .22½- —
tanks, same basis ..... lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. ..... lb. .53 — —
tanks, dlvd E. ..... lb. .49 — —
Tri-isopropanolamine, dms., c.l., dlvd E lb. .23¼- —
dms., l.c.l., dlvd E. ..... lb. .24¾- —
tanks, dlvd. E ..... lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt equald, 100% basis lb. .30 - .305
tanks same basis lb. .26 — —
25-40% soln., dms., c.l., works, frt equald, 100% basis lb. .35 — —
dms., l.c.l., works, frt equald., 100% basis lb. .35½- —
tanks, works frt equald, 100% basis lb. .26 — —
Trimethylol propane, dms., c.l., t.l., dlvd, E lb. .39 — —
dms., l.c.l., l.t.l., same basis lb. .40 — —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 — —
dms., l.c.l., works ..... lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd E. lb. .40 — —
bgs., l.c.l., l.t.l., dlvd, E ..... lb. .41 — —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., l.c.l. frt equald lb .43½- —
Triphenylguanidine, bbls. works. lb .90 — —
Tripropylene glycol dms., c.l., t.l., frt allid E lb. .21 — —
dms., l.c.l., l.t.l., frt. allid. E lb. .22 — —
tankcars and compartmented tankcars, frt. allid. E lb. .18½- —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. allid. E lb. .19 — —
Tripropylene glycol prices 1c. per lb higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 — —
Tung oil, dms., c.l., New York lb. .25 — —
dms., l.c.l., New York ..... lb. .25¼- .25½
tanks, New York ..... lb. .23½- —
tanks, domestic mills ..... lb. .22¾- —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 3.54 —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 — —
dms., smaller lots, works lb. 2.45 — —
Turkey red, bbls. works ..... lb. .62 — —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red, bbls., frt. equald. lb. .26 .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 — —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E of Rockies lb. .35 .39½
Ultramarine blue, jobbing types, bbls., same basis lb. .19 —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c higher W of Rockies
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l. works lb. .07¾ .08
Turkey-type, bgs., c.l. Boston, Bethlehem, Easton, Pa., Hiwassee, Va. N Y lb. .08¼ —
Umber pigment, raw American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms ..... lb. 1.28 — —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N. indust., bgs., c.l., t.l., dlvd. E ton 125.00 — —
bgs., l.c.l. dlvd E ex whse. ton 145.00 — —
45% N. agricultural, bgs., c.l., (30 tons) dlvd. E ton 103.00 — —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equal ton 120.00 — —
37 grade, tanks, same basis ton 145.00 — —
Urethane, USP, dms. t.l., f.o.b., works lb. .65 — —
dms., l.t.l., same basis ..... lb. 70 — —
Uva-ursi leaves, bls ..... lb. .12 — —

V

Valerian root, Belgian, bgs ..... lb. .32 — —
Indian, bgs. ..... lb. .25 — —
dl-Valine, dms., works ..... lb. 21.00 -27.50
Vanadium pentoxide, tech., dms., works lb 1.28 1.33
Vandyke brown, bbls., works .. lb. .09½ .12
Vanilla beans, Bourbon, tins ..... lb. 12.00 -12.50
Mexican, cuts, tins ..... lb. 11.25 -11.75
whole, tins ..... lb. 12.00 -12.50
Vanillin, ex lignin, 100-lb fib dms., 1,000-lb. lots or more lb 3.00 — —
100-lb fib dms., 500-lb lots lb 3.10 — —
100-lb. fib dms., cns., 100-lb. lots lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
20%, bgs., works ..... lb. .0525- —
25%, bgs., works ..... lb. .0575- —
30%, bgs., works ..... lb. .06 — —
Venetian red, 35%, bgs., works lb. .0625- —
40%, bgs., works ..... lb. .0675- —
Vetiver oil, Bourbon, cns. ..... lb. 12.00 -14.50
Haitian, cns. ..... lb. 11.50 -13.50
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E of Rockies lb 4.50 — —
Tungstated, PTA, 250-lb. bbls., dlvd E of Rockies lb. 5.55 — —
Victoria blue toner, bbls., prices 1c higher W of Rockies.
Vinyl acetate monomer, zone 1, 55-gal dms., c.l., dlvd lb. .20 — —
55-gal. dms., l.c.l., dlvd. .... lb. .21½- —
tanks, dlvd. ..... lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 — —
zone 2, 55-gal. dms., c.l., dlvd lb. .21 — —
55-gal. dms., l.c.l., dlvd. ..... lb. .24 — —
tanks, dlvd. ..... lb. .18½- —
tanktrucks, less than 4,000 gals., dlvd lb. .19 — —
zone 1 is all continental US except zone 2. zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 — —
Vinyl chloride monomer, tanks, works lb. .12½- —
Vinyl ether, tech., dms., c.l., works. lb. .26 — —
dms., l.c.l., works ..... lb. .28 — —
tanks, works lb. .25 — —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 — —
bots., 75cc., hospitals bot. 1.56 — —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., l.c.l., works ..... lb. .30 — —
tanks, works ..... lb. .27¼- —
Vinyl methyl ether, cyls., works lb. .30 — —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.
Vinyl propionate monomer, dms., c.l., dlvd lb. .48 — —
dms., l.c.l., same basis ..... lb. .50 — —
tanks, same basis ..... lb. .47 — —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms to tanks, works lb. 1.20 — —
1 to 9 dms., works ..... lb. 1.35 — —
tanks, works ..... lb. 1.15 — —
Vinyltoluene dms., c.l. f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b., dest. frt prepaid lb. .14 — —
Viosterol, in nat vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½- —
Virginia type red, bbls., works lb 1.40 — —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼- —
dry, 500,000 units per gram, kilo lots kilo 67.50 — —
325,000 units per gram, same basis kilo 43.88 — —
250,000 units per gram, same basis kilo 33.75 — —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units .10 — —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 — —
Vitamin A palmitate, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .10 — —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP 1-50 grams, vials, tins gram. 139.00 — —
1% vitamin B_{12}, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.65 — —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity, gram. 128.00 — —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 160.00 — —
Vitamin B_{12}, 1% vitamin B_{12}, oral grade solids, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.33 — —
Vitamin C (see Ascorbic acid)
Vitamin D (see Codliver and Fishliver oils, Calciferol and Viosterol)
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 — —
850,000 units per gram, less than kilo, kilo lots kilo 45.00 — —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram. 4.50 —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls ..... lb. 2.25 - 2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 — —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 — —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 — —
Watchung-type reds, bbls. lb 1.95 — —

Waxes

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms gal. 12.25 — —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .16 - .20
White precipitate, USP, powd., dms., lb. 6.55 — —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls. lb. .16 - .20
Thin, rossed, bls ..... lb. .21 — —
Wintergreen oil, USP, nat., northern, cns lb 6.35 -17.50
USP, nat., southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. ..... lb. .16 - .17
Witch hazel leaves, bls. ..... lb .22 — —
Wollastonite, fine, bgs., c.l., works. ton 39.50 — —
bgs., l.c.l., ex whse. ..... ton 56.00 — —
Medium, bgs., c.l., works . ton 27.00 — —
bgs., l.c.l., ex whse. ..... ton 44.00 — —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs ..... lb. 2.50 — —
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns ..... lb. 4.75 - 5.00

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. ..... gal. .29 — —
Birmingham dist. ..... gal. .29 — —
Chicago dist. ..... gal. .28½- —
Cleveland dist. ..... gal. .29 — —
Geneva, Utah ..... gal. .29 — —
Johnstown, Pa. ..... gal. .29 — —
Lackawanna, N. Y. ..... gal. .29½- —
Lone Star, Tex. ..... gal. .27 — —
Lorain, Ohio ..... gal. .29 — —
Middletown, Ohio ..... gal. .30 — —
Minnequa, Col. ..... gal. .29 — —
Philadelphia dist. ..... gal. .29 — —
Pittsburgh dist. ..... gal. .29 — —
Sparrows Point, Md. .. gal. .29 — —
Terre Haute, Ind. .... gal. .29 — —
Youngstown, Ohio ..... gal. .29 — —
Xylene, petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J. ..... gal. .29 — —
Baytown, Tex. ..... gal. .27 — —
Charleston, S. C. ..... gal. .29 — —
Chicago, Ill. ..... gal. .28½- —
Detroit, Mich. ..... gal. .29 — —
Houston, Tex. ..... gal. .27 — —
Philadelphia, Pa. ..... gal. .29 — —
Providence, R. I. ..... gal. .30 — —
Sewell's Point, Va. .... gal. .28 — —
Wood River, Ill. ..... lb. .28½- —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .23 — —
56°-58° C., m.p., dms., l.c.l., works, frt. equald lb. .33 — —
60°-62° C., m.p., dms., l.c.l., same basis lb. .40 — —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 — —
dms., l.c.l., same basis gal. 1.30 — —
tanks, same basis .... gal. 1.05 — —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis gal. 1.35 — —
dms., l.c.l., same basis gal. 1.40 — —
tanks, same basis .. gal. 1.15 — —
2,4-Xylidine, tech., dms., frt. allid. lb. 1.15 — —
2,5-Xylidine, tech., dms. frt. allid. lb. 1.20 — —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 — —
dms., l.c.l., same basis .... lb. .40 — —
tanks, same basis .... lb. .38 — —

Xylol

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb 2.15 3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. .27 — —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 — —
USP, 90 Int'l B units per gram, 100-lb dms lb. .52 — —
USP, 200 Int'l B units per gram, 100-lb dms lb .56 — —
USP, 300 Int'l B units per gram, 100-lb. dms .... lb. .60 — —
Torula, USP, dlvd lb .18 — —

Yellow Pigments

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. ..... lb. .50 - .55
Ylang-ylang oil, Bourbon, bots lb. 7.00 -22.00
extra, bots. ..... lb. 28.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb lots or more dlvd. lb. .343 — —
bgs., smaller lots, dlvd lb. .373 — —
Zinc acetate, NF, VIII, dms lb. .53 — —
Tech., dms., l.t.l., works lb. .29¾- —
Zinc borate, bgs., 1,000 lbs or more, works lb. .23 — —
bgs. less than 1,000 lbs. same basis lb. .25 — —
Zinc chloride, NF, gran. dms lb. .42 — —
NF, precip., powd., dms lb. .26 — —
Tech. soln., 50%, dms c.l., works. 100 lbs 5.80 — —
dms., l.c.l., works 100 lbs 6.40 — —
tanks, works 100 lbs 5.15 — —
Zinc chloride, tech., fused, dms., c.l., works 100 lbs. 10.70 — —
dms. l.c.l. works 100 lbs 11.20 — —
Zinc chloride, tech., gran., fib. dms., c.l., works 100 lbs. 11.45 — —
fib dms. l.c.l. works 100 lbs 11.95 — —
Zinc chromate bbls., dlvd lb 29 — —
Basic, bbls., dlvd lb. .34 — —
Zinc cyanide, dms., 1,000-lb lots or more, works lb. .55 — —
dms., smaller lots, works lb. .57 — —
Zinc dust, coml., bbls. c.l. works. lb. .1460- —
Pigment, bbls., c.l., works ..... lb. .15 — —
bbls., l.c.l., works ..... lb. .16 — —
Zinc fluoride, bbls., works lb. .49 .50
Zinc hydrosulfite, dms., c.l., frt. allid lb. .21½- —
dms., l.c.l., frt. allid. ..... lb. .23½- —
Zinc metal, prime western, slabs, E. St Louis lb. .11 — —
Prime western, slabs, New York. lb. .11½- —
Zinc naphthenate, liq., 8% Zn., dms., frt. allid lb. .27 — —
10% Zn., dms., frt. allid lb. .33 — —
Zinc nitrate, tech., cryst., bbls., works lb. .20 — —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. allid lb. .14½- —
bgs., l.c.l., 10 tons or more, same basis lb. .15 — —
bgs., l.c.l., smaller lots, same basis lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. allid lb. .15⅛- —
bgs., l.c.l. 10 tons or more, same basis lb. .15⅝- —
leaded, 50%, bgs., c.l., same basis. lb. .15⅜- —
bgs., l.c.l., 10 tons or more, same basis lb. .15⅞- —
bgs., l.c.l., smaller lots, same basis lb. .16⅜- —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. allid lb. .16¼- —
bgs., l.c.l., 10 tons or more, same basis lb. .16¾- —
bgs., l.c.l., smaller lots, same basis lb. .17¼- —
red seal, bgs., c.l., same basis, lb. .15¾- —
bgs., l.c.l., 10 tons or more, same basis lb. .16¼- —
bgs., l.c.l., smaller lots, same basis lb. .16¾- —
white seal, bgs., c.l., same basis lb. .16¾- —
bgs., l.c.l., 10 tons or more, same basis lb. .17¼- —
bgs., l.c.l., smaller lots, same basis lb. .17¾- —
USP, dms., c.l., frt. allid ..... lb. .18¼- —
dms., l.c.l., 10 tons or more, same basis lb. .18¾- —
dms., l.c.l., smaller lots, same basis lb. .19¼- —
Zinc phenolsulfonate, NF, gran., dms lb. .45 - .46
NF, powd., dms ..... lb. .48 - .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. allid lb. .36¼- —
Zinc silicofluoride, dms., works lb. .12½- .14
Zinc stearate, tech., USP, cns., c.l., lb. .41 - —
cns., l.c.l. ..... lb. .42 .46

—Continued on page 51

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VITAMIN A POWDER
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•

RIBOFLAVIN

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PYRIDOXINE HYDROCHLORIDE

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SOLUTION OF COBALAMIN CONCENTRATE

ASCORBIC ACID
(Available in Six Granulations, Also Ampule Forms)

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SODIUM ASCORBATE

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D CALCIUM PANTOTHENATE
DL CALCIUM PANTOTHENATE

•

ALPHA TOCOPHEROL
ALPHA TOCOPHEROL ACETATE

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NIACIN
NIACINAMIDE

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(Both Available in Oil Solutions)
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Sterwin Chemicals Inc.
Subsidiary of Sterling Drug Inc.
1450 Broadway, New York 18, N. Y.
LAckawanna 4-6400

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

Founded October 18, 1871 by William O Allison
Directed 1900-1942 by Harry J. Schnell

EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
MANAGING EDITOR: Arthur R. Kavaler
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SCHNELL PUBLISHING COMPANY, INC.,30 Church Street, New York 7, N. Y.
(REctor 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
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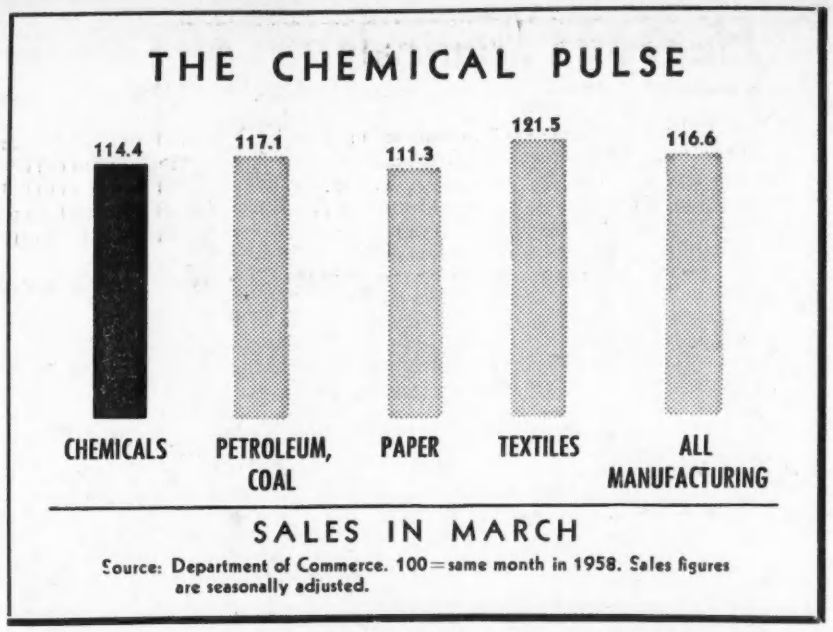
Member of Audit Bureau of Circulations

Volume 175 June 8, 1959 No. 24



Business-Control Prospects

The federal legislative hopper is full of proposals for the control of business activities. As an executive of the petroleum industry told the recent meeting of the marketing committee of the National Association of Manufacturers, "In our particular field, there are bills to tell marketing men what kind of products they may or may not offer for sale in their retail outlets; bills designed to prohibit manufacturers from selling their products to buyers through their own retail outlets; bills which would compel by law the imposition of price differentials in sales to different classes of customers; . . . bills that would be a form of price control by price surveillance; and a host of others couched in honey-coated phrases. No longer can any one particular group of businessmen disassociate themselves from the problems facing other businessmen; there is an obligation of recognizing and identifying any attempts to whittle away at the free enterprise system through a legislative proposal."

In view of the multiplicated policy of the Federal Trade Commission, prohibiting areal or individual price reductions to meet competition, and issuing cease and desist orders against the increasing of prices under specific conditions, it is not surprising that one of the most annoying pending congressional measures is the bill that would require at least some corporations in certain industries to give advance notice of intention to raise prices and to await official approval.

There is a deal of pertinent thinking in the declaration by the NAM executive vice-president before the senate antitrust subcommittee that the bill, "instead of accomplishing the objective of curbing inflation, actually would promote inflation, increase prices to consumers, intensify the concentration of industry, and generally retard forward progress of the economy." He also said that it "would lessen the desire to improve products because of the manifest difficulty of pricing them." His views will not get the backing of the majority of the economic advisers of the federal government; although they evidently impressed at least some of the senators addressed. Those views will be called "side-stepping" by the labor leaders who are vigorously pronouncing and promoting their ideas on what is needed to check and correct inflation.

It is to be expected that the road chosen for any legislative endeavor to do something about inflation will be that presented with the most politically impressive noise. The attitude of the people at large appears to have many economists puzzled. The president of a leading New York bank told a bankers' gathering last month that there was a general tendency to accept inflation as normal; he declared that "once the people begin to expect inflation and to act on it, they create the very excesses we seek to avoid."

But, contemporaneous news from Washington had it that there was no public complacency with reference to what President Eisenhower had been saying about the inflationary situation, especially its federal spending aspect. "Many legislators," said the item, "are getting so many communications from constituents that they have taken to sending a form letter in reply. The letter, drafted by the Library of Congress legislative reference service, contains a brief rundown of the causes of inflation."

The consuming public will decide the inflation-control policy; although it may not be much, if any, more satisfied than will business with the phraseology of the remedying proposal. It goes along with the contention of the labor leaders that profit is a major contributor to inflation. It will push for legislative controls with more regard for their application to profits and overall costs of operation, perhaps shortcutting by way of price-control.

The Federal Reserve Board has been publicly stressing its findings that "industrial prices have risen sooner and faster than in the two previous recoveries." The consuming public can read —and it does read—what the newspapers have to say about industrial profits showing gains averaging 46 percent and running as high as 140 percent. It is not going to restrict its reaction to what was noted in a recent warning to the Chamber of Commerce of the US by one of its former presidents: "American consumers are fed up with rising prices and are doing something about it—more and more are buying cheaper foreign products."

Education—for What

"Education for the Scientific Age" is the title of a report issued a few weeks ago by President Eisenhower's Science Advisory Committee. The purpose of the report, according to the president of California Institute of Technology who headed the panel that prepared it, was to "set national goals for strengthening science and engineering education." The report declared that liberal-arts colleges must insist that no AB degree shall be granted with less than two years of science; that "all branches of science can properly engage 15 to 20 percent of every college student's time." Information is not available on whether "all branches of science" in this instance include any branches of social science. They should.

Today's needs in education fall far more importantly into areas of what may be included in those of engineering education with which the report has to do than they do into those of basic science. It takes at least several thousand technically or professionally trained appliers to make any good practical use of what any scientist provides. The Secretary of Labor was not opining theoretically when, a short time ago, he told a New York dinner audience that the United States "will need 50 percent more professional and technical workers, 30 percent more craftsmen, and 30 percent more semi-skilled laborers by 1970."

There was still more of practical pertinence in the report of the US Employment Service that "jobs for more than 20,000 skilled and professional workers went begging last month (April) because of local labor shortages."

On the social science side, it should be recognized by all who are able to face things logically that the welfare of the human race can be and would be served far better by the activities of neighborly humanists than by those of nuclear scientists.

Washington Talks It Over

Pesticide Producers Still Find Themselves in the Middle of It as the Fight Continues to Rage Between the Wildlife Conservationists and the Control Officials.

By Ralph L. Cherry
Washington Editor

The controversy between wildlife conservationists and control officials goes on. Arguments over mass spraying programs for combating insect infestations—in which the pesticide producers find themselves caught in the middle—show but little sign of abating.

Last year it was the program for controlling the gypsy moth in parts of New York, Pennsylvania and New Jersey that aroused the ire of the bird watchers. This year it is the federal campaign against the fire ant.

At the same time, there are indications that the conservationists are carrying their fight into the state legislatures for more stringent control laws and are finding a receptive mood among the legislators, particularly in those states where hunting, fishing, and other outdoor recreations constitute an important source of state income.

Wisconsin is a case in point, where consideration is being given to requiring a state license for spraying forests and non-crop areas.

Out of the furore, however, there has emerged one ray of sunshine to raise the hopes of the pesticide producers. It is this: When the controversy is brought down to earth and the merits of spraying are weighed against the hypothetical cases made out by the conservationists, the results favor the spraying. Producers have proof of this in the case of the fire ant campaign.

The fire ant program in the southeastern states has been sharply criticized by wildlife and conservation groups. Because much of the controversy has centered in Alabama and since the Alabama Farm Bureau took an active part in soliciting federal and state assistance, it conducted a poll recently to ascertain the reaction of the people most concerned—the farmers whose lands were being treated. Questionnaires were sent to 1,020 farmers and 805 farmers controlling 92 percent of the acreage being treated responded.

Of the replies, 785 farmers believed the fire ant was detrimental to farming operations and seventeen did not; 770 said the treatment cleared up the infestation and ten said it did not; only nine reported any injury or damage of any nature whatsoever to domestic animals and 789 reported none; only sixteen observed or heard of appreciable damage to wildlife resulting from the program and 783 observed none; only one farmer responded in the negative to whether the program was of sufficient value to be continued.

Market Cues

Heavy Chemicals: Sodium silicofluoride in good shape despite the currently static trend of fluoridation business (page 33).

Agricultural Chemicals: Nitrogen solutions will hold at $120 a ton through September, but will advance to $124 for the fourth quarter. Ammonium nitrate will drop $5 a ton in August, but thereafter will go up $1 a month until it reaches $67 in December (page 41).

Trade Name Chemicals & Specialties: Cationic emulsifiers have found a new commercial market — asphalt paving (page 42).

Aliphatic Organics: Methylene chloride prices cut ¼ to 1 cent a pound (page 43).

Coal Chemicals: Naphthalene in critically short supply and phthalic anhydride, its derivative, reported on allocation generally (page 46).

Heavy Chemicals

Sodium silicofluoride appears to be in good shape despite the currently static trend of fluoridation business. One informed source reported last week that while no new town of any size has come into the fluoridation picture lately, the market is buoyed up by established accounts together with a good pick-up in industrial outlets. Its future seems pretty secure even though the controversy surrounding fluoridation makes expansion in that direction difficult to predict.

Mercury's position has softened with a loosening of supply on spot and a retreat of demand. Spot prices eased $2 per flask last week, terminating a protracted period of steep advances that had the slippery metal selling $25 above its first-quarter low.

Most other nonferrous metals held on to their firm tone, though only tin advanced. For aluminum, a reliable source predicted that buyers will meet a higher price ticket on July 1. While uncertainty may exist as to an actual advance, one company has announced it definitely will establish a uniform delivered shipping basis, which in effect will eliminate the price discounts heretofore prevailing. Lead's position was also strong, the strength coming from real increases in consumption as well as from hedge buying. May sales were said to have been exceptionally high, as they were for zinc. The preliminary estimate on zinc sales indicated that they had reached or surpassed the record total established in September, 1958.

The American Paper and Pulp Association reported production for the week ended May 30, at 91.1 percent of theoretical capacity as compared with the revised figure of 96.5 percent for the previous week, and 81.3 percent for the corresponding week of last year.

Price Trends

Advanced

Tin metal, 1c. per lb.
Tin salts, ½c. to 3.5c. per lb.

Reduced

Mercury, $2 per flk.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	June 6, 1958
107.35	107.40	106.96	104.40

For Current Prices see page 9

Acids

Boric—Prices will be advanced across the board July 1 in line with an announcement made several weeks ago.

Hydrochloric — Chemical accounts are operating at a high level and steel is close to capacity. Hydrochloric output has kept up with the brisk demand emanating from both these quarters, trade sources report.

Nitric—Fertilizer needs should soon be fading, but as yet there has been no slackening of nitric movement to that account. Industrial outlets, highly active at present, are taking about 15 percent of current nitric output.

Sulfuric—Steel needs continued to lead the way in sulfuric demand, taxing supply in the Mid-west and absorbing most of East Coast output.

Steel output totaled 2,650,000 net tons during the week of May 25, as against 2,604,000 a month earlier and only 1,685,000 a year ago. For the week just ended, American Iron and Steel Institute predicted an output of 2,674,000 tons, or 94.4 percent of capactiy.

Bases and Salts

Aluminum Sulfate—This material has been moving well all year long to the paper industry and in the past few months has found an active seasonal outlet in municipal reservoirs where it is used as a water settling agent. Prices are unchanged and supply adequate.

Chlorine — Water treatment has been stirred up by hot weather. Producers anticipate that production will suffice to meet this season's needs.

Copper Sulfate — Output totalled 4,100 tons in March, a gain of 17 percent over February and the highest since November, 1958, the Bureau of Mines reported. Shipments outstripped production with an advance of 15 percent to 4,272 tons. Stocks stood at 5,044 tons at the end of the month, as against 5,164 a month earlier.

Nonferrous Metals

Aluminum — Aluminum-base scrap consumption declined five percent in January to 36,295 short tons from December's 38,272 tons, the Bureau of Mines last week reported. Output of alloys by secondary smelters declined 24 percent to 18,987 tons while their shipments declined 20 percent to 19,407 tons. Scrap receipts declined 5,000 tons and stocks 24,000 during the month, the Bureau noted, while scrap consumption was reported to have dropped 1,300 tons for new material and 700 for old.

Smelters' buying prices for scrap were unchanged throughout the month, and, with one minor exception, the same held true for alloys.

Of the consumption total given above, independent smelters used 27,609 tons, or 76 percent; primary producers 5,329 tons, or 15 percent, and foundries, fabricators, and others 3,357 tons, or nine percent. Metallic recovery was calculated at 29,981 tons, consisting of 23,498 tons from new scrap and 6,483 from old.

The Bureau estimated that full coverage of the industry would have shown a total scrap consumption of 42,000 tons and alloy output of 22,000 tons, with 35,000 tons of metallic recovery overall.

Exports of 1,710 tons less imports of 637 tons gave an export balance of 1,073 tons for the month. Except for 26 stray tons, all the imports came from Canada, the Bureau said. Italy received 567 tons of exports, Japan 348, and West Germany 603. Imports were valued at 12.54c. per pound and exports at 14.23c.

Antimony—The supply-demand posture of antimony was in equilibrium in 1958, according to the Bureau of Mines. Declining sales to industry and government, the Bureau noted, were about balanced by curtailed smelter output and restricted acceptance of import offerings. Though shipments to government accounts were less than in past years, they sufficed to prevent a stock buildup.

In the first quarter of this year, accord-

Inorganic Chemicals Output: March

The following figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons.

	Mar.	Feb.
Aluminum chloride anhyd.	2,662	2,160
liq. cryst.	1,860	1,665
Aluminum sulfate, coml..	74,204	71,223
iron-free	4,988	3,899
Calcium carbide	95,320	81,730
Carbon dioxide, liq., gas.	36,665	*33,710
solid	31,632	25,854
Chlorine gas	351,840	310,896
Hydrochloric acid	83,969	*78,259
Hydrofluoric acid	8,904	8,074
Hydrogen peroxide	2,930	2,665
Nitric acid	267,215	240,969
Phosphoric acid	166,858	145,635
Phosphorus, elemental...	32,100	28,719
Phosphorus oxychloride..	1,349	1,026
Phosphorus trichloride...	1,283	1,151
Potash, caustic, liq.	8,116	7,131
solid	1,629	1,537
Soda ash, syn., light	165,257	157,434
dense	175,527	144,772
Soda ash, natural	58,045	50,251
Soda, caustic, liquid	387,191	*335,609
dry	40,244	40,168
Sodium bichromate and chromate	9,610	8,477
Sodium chlorate	7,325	6,149
Sodium hydrosulfite	2,254	2,176
Sodium metal	9,350	8,206
Sodium phosphate, tribasic	5,000	4,004
Meta	4,990	4,974
Tetra	9,539	7,229
Acid pyro	1,631	1,248
Tripoly	57,779	55,436
Sodium silicate	43,348	33,326
Sodium sulfate, anhyd.	23,015	19,777
Glaubers salt	9,866	*9,051
Salt cake, crude	61,907	52,691
Sulfuric acid, gross	1,579,878	1,406,287

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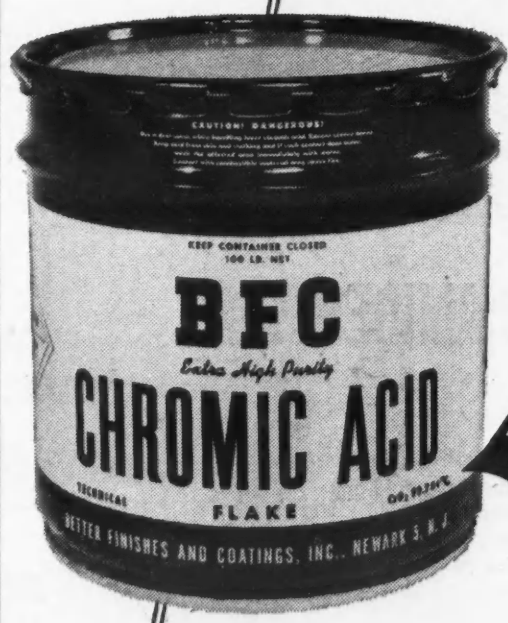

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Heavy Chemicals

ing to another Bureau of Mines report, output held its own at 2,100 short tons, which was virtually equal to that of the corresponding period of last year, though 12 percent less than in the previous quarter.

The price has been unchanged since February of last year when it was reduced 4c. per pound to 29c., bulk, f.o.b., Laredo, Texas. First quarter consumption totalled 3,000 tons, approximately, with a decline in by-product lead offset by an increase in oxide use.

Chromium—March consumption of chromite was 32 percent higher than that of February, according to the Bureau of Mines. Metallurgical use was up 24 percent, refractory 23 percent, and chemical 15 percent.

Output of 33,977 short tons of chromium ferroalloys and metal was consumed as 79,681 tons of chromite (averaging 46.6 percent chrome oxide) and 2,352 tons of steel additive. The consumption total included 63,386 tons of metallurgical grade ore, 12,833 tons of chemical grade, and 3,462 tons of refractory.

Lead—Sales of 9,452 tons took place at unchanged prices of 12c. per pound, New York, and 12.3c. per pound, E. St. Louis. May sales were reported to have been exceptionally high, compounded of increased consumption and considerable hedge buying.

Mercury—Market finally weakened under the impact of easier supply on spot and reduced buying interest. Sellers trimmed $2 per flask off asking prices, quoting now at $243 to $245, spot, minimum ten flasks.

The tightness that prevailed in the first quarter and later brought such a steep uptrend of prices has been spelled out in detail by the latest report of the Bureau of Mines. Output was reported at only 7,870 flasks, the lowest quarterly level reached since the corresponding period of 1957. Of more significance, imports declined nearly 50 percent to 7,800 flasks. About 6,000 flasks came from Spain through barter transations, the Bureau noted.

Silver—Price has enjoyed a long steady spell at 91⅜c. per troy ounce, spot. Current demand is at a seasonable pace.

Tin—Narrow fluctuations gave way late in the week to an advance of 1c. to $1.04, spot.

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DOW CHEMICAL AUDITOR: Chester F. Weaver, appointed auditor of the Dow Chemical Company, Midland, Mich.

Food, Drug Men Set For Developments Talk

New technological and legal developments in the food, drug and cosmetics field will be under discussion at the sixty-third annual conference of the Association of Food and Drug Officials set for June 21-25 at the Bradford hotel, Boston.

Papers slated for the meeting will also cover frozen foods, food additives, meat inspection, hazardous substances, federal poultry inspection, radiation of food products and similar subjects.

Harold Clark, chief of the Connecticut State Food and Drug Commission, will participate in the conference as first vice-president of the association.

The national secretary-treasurer, J. F. Lakey, director of food and drugs in the Texas State Department of Health said the conference expects some 300 food and drug officials to attend as well as representatives of industry.

A major question to be covered by the conference, one official noted, is: how the state can proceed, in the absence of state laws of food additives, in cooperating with inspection and regulation programs under the recent additive amendment to the food, drug and cosmetic act.

In addition to the formal scientific sessions, social events have been arranged, it was added.

Hercules Powder Develops 3 New Tall Oil Chemicals

The development and commercial availability of three new chemicals based on tall oil, with a wide variety of potential application, has just been reported by Hercules Powder Company, Wilmington, Del.

The three new fatty amines, chemically unique in composition, are expected to find application in ore flotation, as reagents for chemical processing, and in the preparation of asphalt emulsions for paving roads. Other potential fields of application include synthetic resins, printing inks, protective coatings, and floor coverings.

One product, "Delamin P," results from processing the fatty acid portion of tall oil. Another, "Delamin PD," is the high-purity distilled form, while the third new amine, "Delamin X" is a mixed resin-fatty amine corresponding to the processing of whole tall oil.

Synthetic Rubber

—Continued from page 7

rubbers as regards their chemical structure, are superior to the former; they are both oil-and-heat-proof and are related to chloroprene rubber which possesses excellent elasticity and is resistant to oil, ozone and a variety of chemical materials and is also non-inflammable."

Chloroprene rubber, Mr. Gordin feels, is especially useful for production of different kinds of belt drives, conveyor belts, cable casings and similar industrial articles. Although its manufacture, he adds, has increased during the last few years, demand has always outstripped supply; therefore future plans include construction of new installations whereby in 1965 output of this product "may be very considerably accelerated."

Russia is also looking to expand the commercial production of copolymer chloroprene rubber, also copolymer chloroprene with 3 to 5 percent styrene (which makes it less able to crystallize).

Polyisobutylene rubber of several different types is also now being produced by the Russians, Mr. Gordin said. Because of their excellent chemical stability they are used in the preparation of anti-corrosive coatings and on account of their high dielectric power and ozone-resistant qualities, they are widely used in electro-technical industries.

Also, he noted, commercial production of polysulfide rubber, several types of thioxole and also of butyl rubber, is being organized, and also that of heat-proof organosilicon and oil-proof butadiene methylvinylpyridine rubber.

Fertilizer Plant Construction Is Started by AAC in Minn.

Construction is under way on a new "Agrico" fertilizer plant near Sleepy Eye, Minnesota, American Agricultural Chemical Company, New York, reports.

The plant will be built on a sixty-four acre site purchased recently by the company, located six miles east of Sleepy Eye. The first phase of construction is scheduled for completion next fall.

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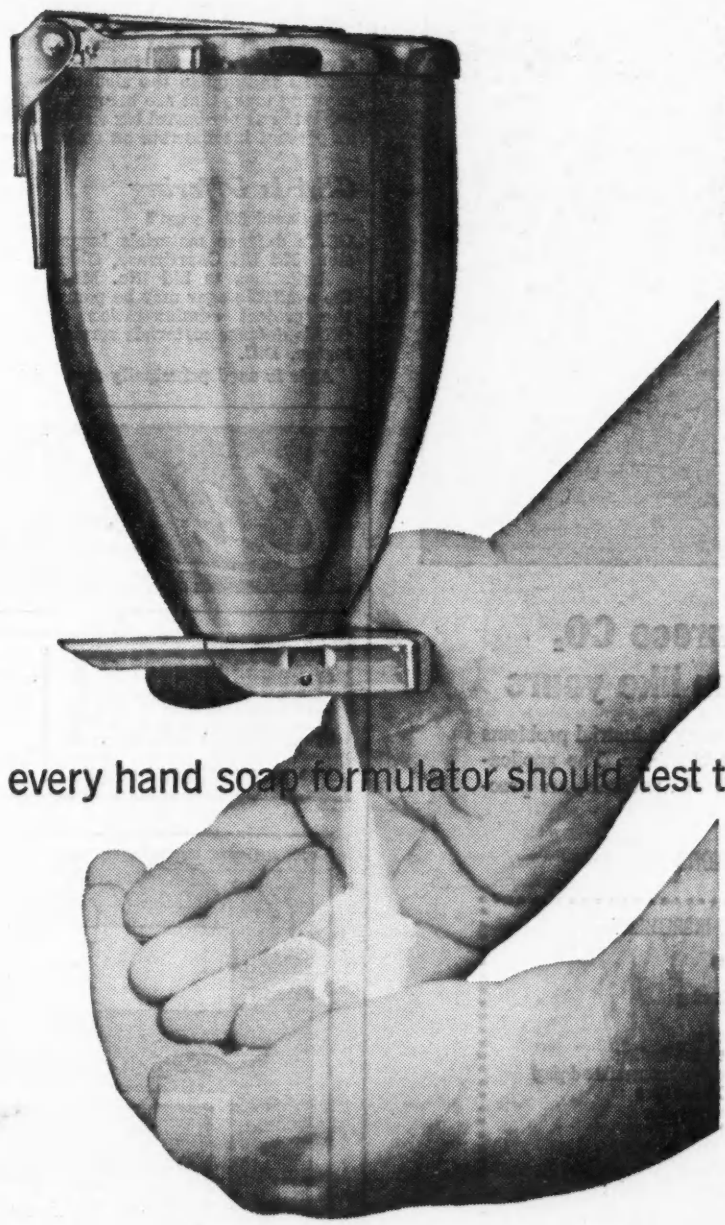

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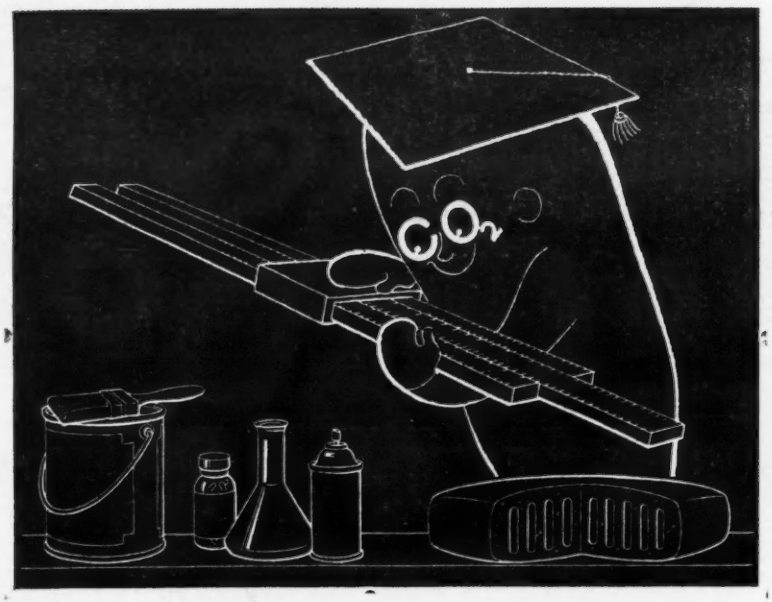

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Alcohol Consumers See No Tax Relief in Offing

Alcohol consumers, both individuals and those industry manufacturers who are subject to the tax—chiefly the toiletries producers—can expect no relief from the $10.50 per proof gallon federal levy for at least another year.

The house ways and means committee last week voted 22-3 to extend the tax, along with other expiring excises, until June 30, 1960, and there is every reason to expect that congress will approve.

The $10.50 tax is a holdover from the Korean crisis days when congress sought emergency funds for the defense effort by boosting the rate on distilled spirits $1.50 from its $9 level.

The tax was to remain in effect for only one year. But like most of the other emergency excise increases it has been renewed from year to year.

This time there was some sentiment in the house committee and within the Treasury for a two-year extension of all excise taxes that expire next June 30, but a move to put this idea into force was soundly squelched by house leadership.

Even though the question of renewing the levies will come up again next year, which is an election year, they favored reviewing the need for the taxes annually.

The alcohol tax, together with other excise levies, produces about $2 billion of revenue annually for the federal Treasury. In addition to the alcohol tax, other expiring taxes that are being extended include the $1 per barrel tax on wine and the 52 percent income rate on corporations.

GSA Is Offering

—Continued from page 5

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Sterling Drug, Canada, Dedicates a New Facility

Sterling Drug Mfg., Ltd. has formerly dedicated its new plant in Aurora, Ont., Canada.

The plant, which began production a few months ago, supplies the following company units with medicinal and health products: Bayer Company Ltd.; Sterling Drug Mfg., Ltd.; Winthrop Laboratories of Canada Ltd.; Carter Cummings & Co., Ltd.; Cook-Waite Laboratories Inc., and Sterwin Chemicals, Ltd.

Obituaries

Lyall Tracy, industrial relations manager for Rayonier, Inc., at Hoquiam, Wash., died near that city June 5. He was sixty-five years old. Mr. Tracy had been with Rayonier since 1929 and had been in the industrial relations post since 1947.

Dr. James Zetek, an authority on termites who was well known for his work in the Canal Zone, died recently in Panama. He was seventy-two years old.

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Fluorine, Tomorrow's Rocket Fuel, Spending

—*Continued from page 7*

rine tomorrow, but what about today. Says the quarterly's report:

"The aluminum industry in 1957 consumed about 40,000 tons of hydrogen fluoride in the making of aluminum fluoride. The compound is used principally as a fluxing material in the reduction of aluminum oxide to aluminum. In addition, the aluminum industry uses large amounts of synthetic cryolite, made from hydrogen fluoride, as an electrolyte in the reduction of aluminum.

"This application resulted in the consumption of about 13,000 tons of hydrogen fluoride in 1957. With the strong growth trend for aluminum expected to continue, a corresponding growth in the use of aluminum fluoride and synthetic cryolite should follow.

"The fluorcarbons now constitute the second largest single outlet for hydrogen fluoride. There is a wide variety of carbon and fluorine containing compounds which together consumed an estimated 38,000 tons of hydrogen fluorine in 1957.

"Growth in the demand for fluorcarbons for use in aerosols and refrigerants has been exceptional in recent years. Of the 1957 output of fluorcarbons, aerosols and refrigerants were estimated to have each consumed about 45 percent, with the balance of 10 percent used in fluorine plastics and miscellaneous items.

"In 1957 aerosol containers, sold for non-food items using fluorcarbons largely as the propellant, were estimated at 390 million units, up 22 percent from the preceding year, and having a sales value of $400 million. Food aerosols, mostly whipped cream, use a non-fluorinated type of propellant and consumption in 1957 was estimated at 80 million units.

Hair Sprays Boom in Aerosol Market

Based upon 1957 figures, hair sprays took about 28 percent of the non-food aerosol market, followed by shaving lather, 15 percent; room deodorants, 12 percent; paints, 9 percent; insecticides, 8 percent; perfumes, 5 percent; and the balance distributed among a wide range of other products. Notwithstanding the recession, consumption of non-food aerosols has been estimated at in excess of 410 million units in 1958.

According to the report, while fluorine plastic is not as yet produced in volume, its future potential is considered good due to certain outstanding characteristics.

One of the chief drawbacks to the use of fluorine plastic has been the difficulties encountered in molding. Recently a new molding process was developed called "Chemforming" which presumably has overcome the major problems in molding fluorine plastic, according to the report.

Grace's Cryovac Division Putting Addition on Plant

Construction of a $2 million addition to the Cryovac plant at Simpsonville, S. C., is the latest plan of the Cryovac Division of W. R. Grace & Co., Cambridge, Mass. This is the second major expansion of Cryovac Division's Simpsonville plant since its completion four years ago.

Work has already started on the addition to existing plant facilities which is scheduled for completion in 1961.

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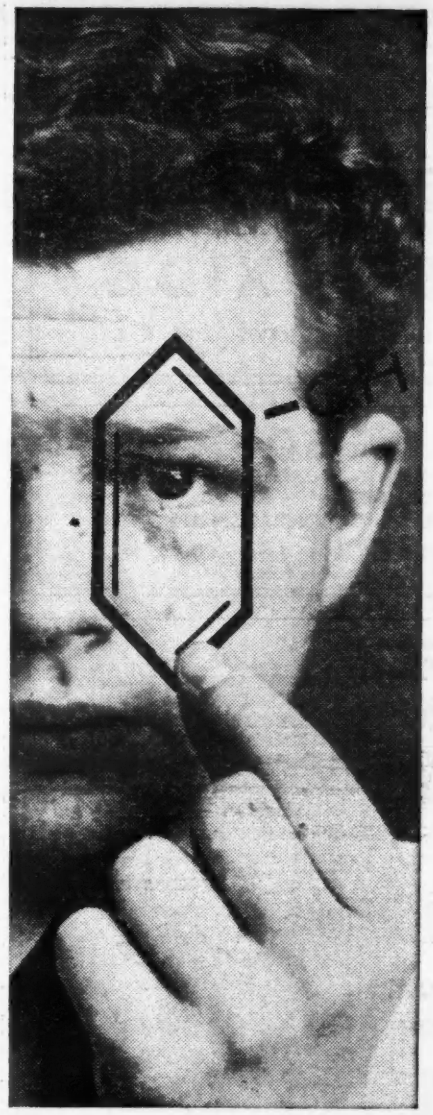

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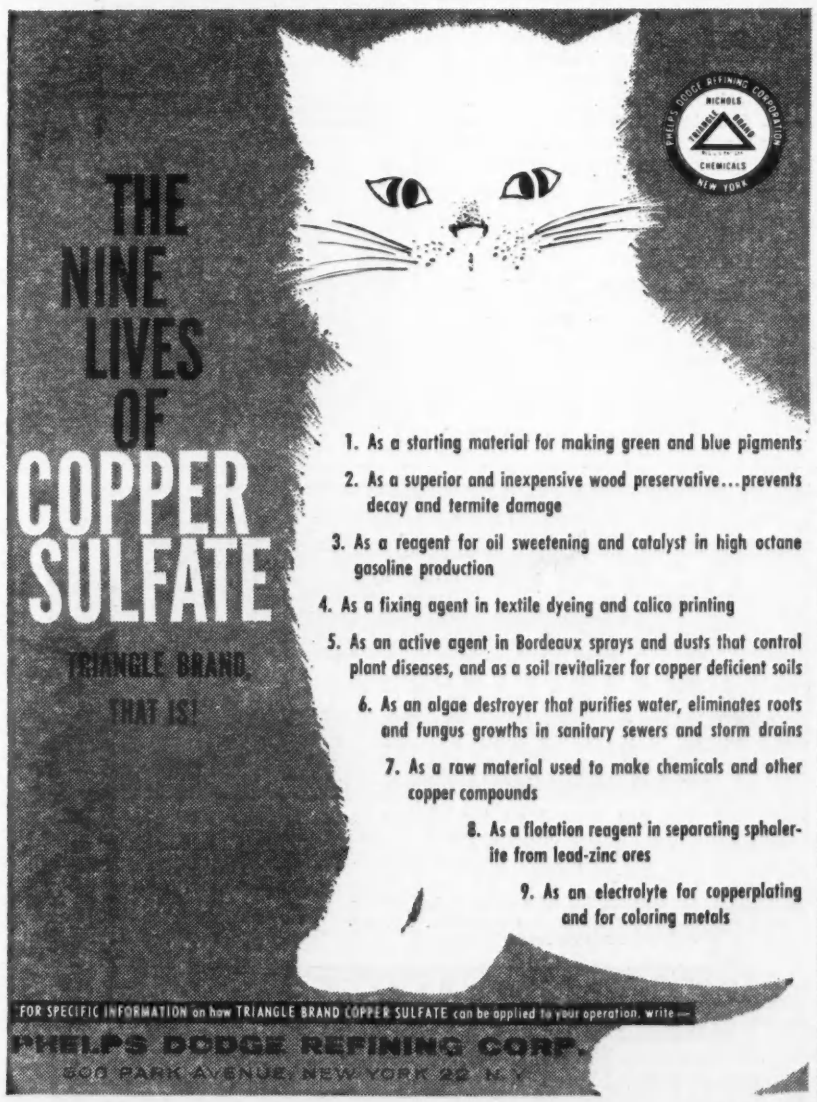

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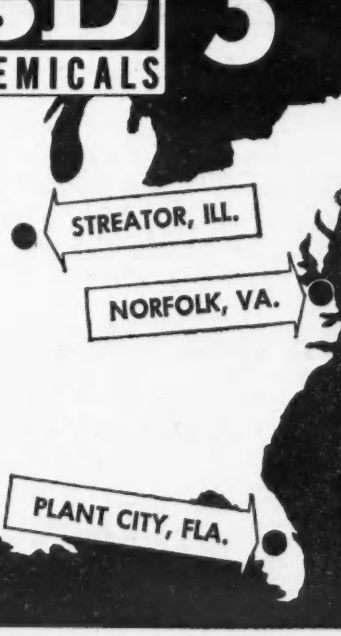

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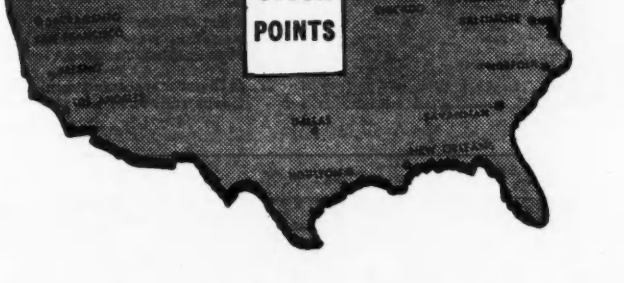

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Jobs & People

Anderson Chemical Company, a division of Stauffer Chemical Company, New York—**Michael M. Harman** has become midwestern sales representative and will be headquartered in Stauffer's Chicago office.

Ansbacher-Siegle Corporation, a subsidiary of Sun Chemical Corporation, New York—**Thomas R. Sullivan** has been named sales representative in the Chicago, Twin Cities, western Michigan and St. Louis, Mo., areas.

Armour Pharmaceutical Company, Chicago—**E. G. King** has been appointed technical service manager of the bio-chemical department, after having been with Armour sixteen years in numerous technical capacities.

Cerro de Pasco Corporation, New York **Richard H. Lewin,** formerly president of the corporation's Lewin-Mathes Company Division, has been named vice-president of the corporation in charge of domestic nonferrous metal fabricating operations.

Dewey & Almy Chemical Division of W. R. Grace & Co., Cambridge, Mass.—**Dr. Krishna K. Khandelwal** has been appointed senior development engineer in the Darak Battery Separator Laboratory.

Diamond Alkali Company, Cleveland, Ohio—**Dr. John A. Bungs** and **Dr. G. H. McCain** have been named research associates in the company's department.

Metro-Atlantic, Inc., Centerdale, R. I.—**M. M. McCann** has been appointed to the technical and sales staff.

National Aniline Division of Allied Chemical Corporation, New York—**H. Dorn Stewart, jr.,** has been made divisional sales representative for the north central Pennnsylvania sales area and **Joseph M. Mellion** has been named divisional sales representative in the Baltimore area after having been in Reading, Pa., in a similar post.

U. S. Borax Research Corporation, a unit of United States Borax & Chemical Corporation, Los Angeles —**M. A. Peters** has been made a research engineer and **D. L. Sawyer** has been chosen section head of process improvement research.

US Rubber Licenses Rivals To Vulcanize Butyl Rubber

United States Rubber Company has licensed its major competitors and a group of other companies to vulcanize butyl rubber by a new process that makes possible large-scale savings and greatly improved rubber products.

The major competitors are the Goodyear Tire & Rubber Company, Firestone Tire & Rubber Company, B. F. Goodrich Company, General Tire & Rubber Company and Seiberling Rubber Company. Included among the other licenses is the Continental Can Company.

Butyl rubber cured by US Rubber's new process has high heat resistance and is especially suitable for products that are subjected to high temperatures for a long time. One of its major uses is in tire curing bags. Bags made of this butyl last five times as long as the standard butyl bags.

Montecatini to Raise Money For US Petrochemicals Unit

Montecatini will raise $10 million on debentures here for the construction of a new petrochemicals plant in the United States. The company has registered the offering with the Securities & Exchange Commission, along with warrants to buy capital shares of the company.

The offering is to be made in units consisting of $1,000 of debentures and a warrant to purchase capital shares having a market value of about $500 at the date of issue.

Sulfur Extraction Plant Is On Stream in Canada

Texas Gulf Sulphur Company, Devon-Palmer Oils, Ltd., and Shell Oil Company, Canada, Ltd., have started up a new sour-gas processing and sulfur extraction plant at Okotoks, near Calgary, Alberta.

Rated capacity of the new installation, which is being operated by Texas Gulf Sulphur, is 370 long tons of sulfur daily. The gas gathering system, sweetening plant and sulfur conversion units are designed to process 30 million cubic feet of sour gas a day.

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Petroleum Derivatives

Matters in this market continued to be fairly static last week. Throughout the industry buyers are rather certain that the Pittsburgh labor problems will result in a strike. A general feeling of wait-and-see prevails in the market. This attitude has been noted to precede a strike or any other irregularity that might change the course of business. A trend of stepped-up purchasing has also been noticed in the market. Benzene's position stays much the same. Styrene producers have been somewhat hopeful of late with the recent reports that there may be an upturn in automobile output. This same upturn in Detroit has made for happier producers of partial aromatics as well. The toluene picture hasn't felt any change either. Stockpiles remain heavy even with the increased government buying of toluene for use in military air vehicle's gas tanks.

The daily average production of liquefied gases at refineries increased three percent during the month of March, according to the current report from the Bureau of Mines. Daily average LPG demand for fuel and chemical use declined by sixteen percent during March. The report states also that stocks of liquefied gases totaled 559 million gallons, which is 166 million gallons above a year ago. Underground stocks of LPG at plants and terminals totaled 375 million gallons on March 31, 1959, an increase of 99 million during March.

A report on liquefied petroleum gas storage capacity at plants and terminals of March 31, reveals a storage capacity of 1,397 million gallons, which is an increase of 94 million gallons over that reported on September 30, 1958. Included in the stocks reported at plants and terminals are pipeline fill and stocks in working tanks on pipeline of 11 million gallons of liquefied petroleum gas.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(1926=1949 average)

Last week	Prev. week	Last month	June 6, 1958
104.42	104.42	104.42	106.73

For Current Prices see page 9

Solvents and Diluents

Benzene—Business volume of benzene has been good. It is generally felt that the labor-management problems in Pittsburgh will result in a strike. This plus the usual summer vacation period slowdown will make it a slow quarter. There are two questions being asked throughout the industry right now that cannot be answered at this time. One is: how long will the strike last if it does take place? And out of this question arises another: if the strike turns out to be a long one will it induce foreign producers to jump into the market?

Cleaners Naptha — Prices remained steady last week with supplies described as being entirely sufficient. A growing market—the use of synthetic fibers for summer clothing—has slightly dampened the general prospects, but producers still see a prevailing healthy sales picture.

Toluene—Sales and volume have been good. Government buying of toluene has made the stockpiles appear less formidable. Despite the premise that every little bit helps, however, producers don't feel that the government purchases will solve all the problems confronting the material by a long shot. One such problem is the fact that even though business volume is good, prices are very low.

Xylene — As is the general feeling throughout the industry, producers of xylene expect little if any change in this market during the summer months. One of the factors in the anticipated slowdown of business is the general consensus that a strike in Pittsburgh, due to labor-management difficulties, will take place this summer.

There have been no further price changes since the surprise shift in the mid-west not too long ago. The price change is looked upon by most as a natural adjustment. A minority, however, still feels that it was totally unnecessary.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended May 23 totaled 262,280,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 259,088,000 barrels the preceding week, this represents an increase of 3,192,000 barrels comprising an increase of 2,178,000 barrels in stocks of domestic crude and an increase of 1,014,000 barrels in stocks of foreign crude.

LPG's

Butane—According to the current Bureau of Mines report, production of this material at plants during March amounted to 178,127,000 gallons as compared with the 61,026,000 gallons at refineries. Stocks at plants, terminals, and underground on March 31 were 117,169,000 as compared with 85,697,000 gallons on hand on February 28. Deliveries from plants and terminals for use in gasoline during March totalled 73,382,000 gallons, while demand for other uses came to 132,829,000 gallons.

Butane-propane mixture — Production at plants amounted to 61,984,000 gallons in March, the current report of the Bureau of Mines states. At refineries, output came to 11,424,000 gallons. Stocks of butane-propane mixture at plants, terminals, and underground on March 31 amounted to 26,694,000 gallons and 28,657,000 gallons on February 28. Demand for use in gasoline came to 504,000 gallons and for other uses 75,119,000 gallons.

Isobutane—According to the current Bureau of Mines report, 55,065,000 gallons of isobutane were produced in March. Stocks on March 31 were listed at 50,670,000 gallons and 50,659,000 gallons on February 28. Demand for isobutane used in gasoline came to 55,054,000 gallons.

Propane—Output at plants of the item, stated the Bureau of Mines in the current report, amounted to 319,728,000 gallons against 142,632,000 gallons at refineries. Stocks of propane at plants on March 31 and on February 28 respectively totaled 272,681,000 and 217,262,000 gallons. Deliveries from plants and terminals for use in gasoline came to 4,242,000 gallons and for other uses 400,221,000 gallons.

Miscellaneous

Crude Oil—The amount of domestic crude oil that will be consumed or exported in June 1959, is estimated by the Bureau of Mines at 6,950,000 barrels daily as compared with 7,190,000 barrels daily forecast for May 1959. The forecast contains no recommendations as to desirable rates of crude production or changes in industry conditions and policies in effect. It is an estimate of probable consumption based on actual industry conditions and policies in effect; adjustment for seasonal changes in refined stocks; allowances for the current rate of imports of foreign crude oil and products; and the production of natural-gas liquids. The forecast includes estimates of a total gasoline demand of 4,350,000 barrels daily in June, a gasoline yield of 44.8 percent, and total crude runs of 7,750,000 barrels daily.

Crude runs for June, however, according to the Bureau of Mines, are not expected to show the usual seasonal increase because of the high level of gasoline stocks.

Data for March indicate total crude runs of 8,150,000 barrels daily including foreign runs of 942,000 barrels per day. Indicated crude runs to stills for April were 7,879,000 barrels daily including foreign crude runs of 813,000 barrels per day. The indicated demand for domestic crude oil in April was 7,067,000 barrels daily with production of 7,127,000 barrels daily.

The effect of mandatory import controls is especially noticeable in product import figures for April. Product imports dropped from over 1,000,000 barrels per day for the first three months of 1959 to 550,000 barrels per day during the month of April.

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DDT Developments in Mexico Have US Marketers Wondering If Trouble's Ahead

OPD Special Report on DDT

—*Continued from page 3*

for one of them says, "We'll do what we did in the United States for years: we'll run at something less than capacity."

So far, the Mexican government is doing what it can for its infant industry. As of now, the door has been slammed on all but imports of free 75 percent wettable powder under the auspices of the malaria eradication program of World Health Organization.

What it means is that next year there'll be no Mexican market for US producers, and they'll have to look elsewhere to get rid of a 12-to-14-million pound slug of material.

All is not lost, however. Reports are that Brazil will need an additional 3.5 to 4 million pounds per year in the near term. Brazil has a 3.6-million-pound-per-year plant, but it is not operating, at latest report.

Big Piece of Market Will Be Missing

Despite this, however, there will be a sizable chunk of market missing during the next few years, and this situation has producers here guessing that production of technical DDT will run at 125-130 million pounds annually, compared with an estimated output of 150 million pounds in '59.

Though DDT production is channeled about equally into domestic and export use, it is with exports that the fortunes of the industry will rise or fall, depending largely on the decisions of WHO and the International Cooperation Administration.

Though WHO recently expressed concern about where it would get the $7 million needed this year, ICA and United Nations Children's Emergency Fund (UNICEF) are expected to account for some 49 million pounds of (technical) DDT purchases under WHO's malaria program. Throw in another million or so pounds purchased by the Pan American Sanitary Bureau under WHO auspices.

This kind of purchasing (in the neighborhood of 50 million pounds a year) for the malaria program is expected to continue unabated, at least for the next three years.

In fact, the scuttlebutt now is that ICA, through its buying agent, General Services Administration, will ask for about 40 million pounds of 75 percent wettable powder (30 million pounds technical) in November.

75 Percent Wettable Powder Mandatory

Supply of DDT in the form of 75 percent wettable powder has been mandatory in the WHO program—and this has redounded to the advantage of the United States, in that, so far as is known, only US millers have the know-how to air-mill DDT into this particular form.

Indications are that we're ahead of the Soviet Union on this one. That enigmatic nation last year paid part of its UN bill in DDT—an unsettling, but not unanticipated move.

Reports are that some 300 tons of technical were remitted against UN costs—but the material had to be ground by formulators in this country, since the Russians were unable to make their own 75 percent powder.

That's not to say they won't try it in the future. Further, DDT is produced in Italy, West and East Germany, European Common Market nations, as well as in India and behind the iron curtain. US sources know they won't have the monopoly on 75 percent wettable powder forever. In fact, Mexico could be a real dark horse, some believe.

This leaves several other regions relatively untouched so far.

Take Africa, for instance. The only DDT program there now is a limited one, run solely by the Belgian government. The whole continent is wide open to a mosquito-control project.

It's not too difficult to imagine large ICA deliveries of DDT to Africa during the next few years, if congress decides to pursue its current line of thinking and vote substantial foreign aid of a non-military nature. Further, should the UN beef up its takings owing to an African program, US producers would benefit even more.

Adding more impetus to an African move in the near future is the fact that there is a great deal of political benefit to be obtained through an intensive ICA program in an area currently wracked by the growing-pains of nationalism.

South America, too, is reportedly open to a much more intensive WHO saturation, although imports there are at a fair level at present.

Hence, US producers are watching the export market closely for future trends. They're banking on rising standards of living overseas as another factor in possible increased exports of DDT in the next few years.

The other half of the DDT market—in the United States—also bears watching. What's happened to business here during the past few years is directly responsible for the current good health enjoyed by the industry.

DDT was a war baby. Developed by Geigy in Switzerland just prior to World War II, it was recommended to the US Army as particularly effective against the typhus louse. After that, things moved fast, and the versatile broad-range pesticide's output moved up into the millions-of-pounds-per-year category.

DDT's Impact on Pesticide Market

What was its impact on the established pesticide market? In 1944, some 80 million pounds of lead arsenate and 60 million pounds of calcium arsenate were produced. DDT output during that time amounted to around 200,000 pounds.

In the 1957-58 season, only about 12.5 million pounds of lead arsenate and 9 million pounds of calcium arsenate were produced. In the same period, DDT output exceeded 140 million pounds.

Further illustrations of DDT's fantastic growth: Output jumped 100 million pounds in 1959 over 1949 levels. During the last five years, this growth rate has continued, as output has jumped by 50 million pounds.

But the growth of this material has been far from smooth. Back in 1946, when the future looked rosy and prices were up, there were sixteen primary producers of DDT listed in the Tariff Commission's annual report.

In 1948, the number dropped to fourteen. Then, in 1956, the price dropped from 27 cents a pound to 23 cents, and producers' ranks dwindled to ten. In '57, the price skidded as low as 19 cents, and then there were nine.

Price for technical bounced around during 1957 and '58, and the number of producers dropped to seven. At the end of '58, Michigan Chemical Corporation pulled its 15-million-pound-a-year capacity out of the market, leaving six producers with a combined capacity of 152 million pounds a year.

This shake-out, many believe, has been the key factor in the current rebound enjoyed by the industry. Prices have firmed to the extent that business is being done at only 1 cent a pound below list.

Producers booked a large part of business on a six-month basis at 22 cents a pound for technical prior to January 1. On that date, prices were increased to 23 cents a pound for technical flake, for new orders.

Very little new business has been done until recently, and sellers indicate that it is not being booked at 23 cents—official list—but at 22 cents, the old price.

What does this indicate? One seller, who got out of the business some time back with a big sigh of relief, says, "I never heard of a pound of DDT being sold at list."

The fact is that DDT producers have been running their plants at or near capacity for most of this year in order to fill ICA and domestic formulators' needs. Some observers now feel that there are stocks on hand sufficient enough to warrant a 22-cent price.

Will Price Go Any Lower?

If 23-cent material is being offered at 22 cents, is this an indication that the price could go even lower? A loud and unanimous "No" comes from the industry.

Time was, when DDT under the ceiling price set by the Office of Price Administration, was $1.20 a pound. Now, it's 22 cents. Prices can't go any lower without the industry being driven to the verge of disappearance, some say.

There is, on the other hand, some feeling that quotations are liable to be increased, although this optimism is somewhat dampened by the fact that new business is being booked at old prices, after an attempt to raise prices January 1.

While a few observers believe a steel

—*Continued on page 54*

DDT DOMESTIC CAPACITY AT MID-1959

152 Million Pounds of Output Is Split Among Six Firms

Diamond Alkali	Houston, Tex.	20 million lbs./yr.
General Chemical	Marcus Hook, Pa.	12 million lbs./yr.
Geigy Chemical	McIntosh, Ala.	15 million lbs./yr.
Lebanon Chemical	Lebanon, Pa.	15 million lbs./yr.
Montrose of California	Torrance, Calif.	65 million lbs./yr.
Olin Mathieson	Huntsville, Ala.	25 million lbs./yr.
	Total	152 million lbs./yr.

Diamond Black Leaf de Mexico will start operations in July at an 8-million-pound-a-year DDT plant in Mexico City, Mexico. Montrose Mexicana went on stream in January at a plant in Salamanca, Mexico (rated annual capacity: 15 million pounds).

DDT PRODUCTION

1965 . .	*150.0 million lbs.
1960 . .	*125.0 million lbs.
1959 . .	*150.0 million lbs.
1958 . .	143.2 million lbs.
1957 . .	124.5 million lbs.
1956 . .	137.7 million lbs.
1955 . .	129.7 million lbs.
1954 . .	97.2 million lbs.
1953 . .	84.4 million lbs.
1952 . .	99.9 million lbs.
1951 . .	106.1 million lbs.
1950 . .	78.2 million lbs.
1949 . .	37.9 million lbs.
1948 . .	20.2 million lbs.
1947 . .	49.6 million lbs.

*Industry Estimate

Source: Tariff Commission

Despite the threat of possible foreign competition, political winds are favorable to higher purchases of DDT for use overseas. Right now, ICA is concentrating most of its efforts on getting rid of malaria in India.

This is good politically for the United States, in that we are helping that country through the ICA Point Four program. But even with the tremendous efforts being exerted there now, malaria is being controlled only in isolated areas.

One source estimates that it would cost 10 cents per person per year to successfully obliterate malaria in India. That nation's population is currently 400 million—and it takes five years of treatment to remove the threat of malaria.

Should ICA and the UN go all-out in their efforts to rid India of malaria, US producers would be assured of a huge cut of future business. As things stand now, the current five-year program in India has three more years to go, at about a 50-million-pound-a-year (75 percent wettable powder) clip.

Producers here can be assured of at least that amount, but should the program be beefed up to a full-scale project, it could mean consumption of up to 180 million pounds a year DDT (technical)—if the government and the UN decide to allot the funds necessary.

ICA and UN Purchases Listed

The following table shows purchases of 75 percent wettable DDT powder for ICA and UN, under the auspices of WHO. The figures are reduced to a technical basis, and are in millions of pounds:

Year	ICA	UN
*1962	75.0	11.25
1959	37.5	9.875
1958	24.75	11.25
1957	15.0	9.545
1956	11.0	9.5

* Estimate.

Pan American Sanitary Bureau, a branch of WHO, also makes occasional purchases for the Latin American area (although it did purchase a large amount of material for India last year for some undisclosed reason) to the tune of 500,000 to 1 million pounds a year.

So far, only in India has the malaria eradication program reached such a pitch.

DDT DOMESTIC DISAPPEARANCE

1962-63 .	*75.0 million lbs.
1959-60 .	*65.0 million lbs.
1958-59	**65.0 million lbs.
1957-58 . .	66.7 million lbs.
1956-57 . .	71.0 million lbs.

*Industry Estimate

**Department of Agriculture Estimate

Source: Department of Agriculture

Agricultural Chemicals

Schedules on some nitrogen materials were announced for the 1959-60 fertilizer year. Nitrogen solutions will remain at the current level of $120 per ton through September, but will advance to $124 per ton for the fourth quarter. In the heavy shipping season, January through June, 1960, the price will be advanced to $128 per ton as against the $120 per ton held this year. On ammonium nitrate, the price will drop $5 per ton in August to $63 and will advance $1 per ton each succeeding month to bring it up to $67 per ton in December. For the January through July, 1960, period the price will be $68 per ton, unchanged from the level held this year.

Despite a production dip in 1958, United States potash sales increased by 10 percent according to producers' reports to the Bureau of Mines. Stocks in producers' hands at the close of 1958 were approximately 33 percent less than at the end of 1957. Imports of potash materials were up 18 percent with West Germany, France, East Germany, Spain, and Chile continuing as the leading suppliers. Exports of potash materials increased 8 percent, the Bureau said.

Production of pesticides in 1958 scored material gains above 1957, according to the Department of Agriculture. Increased output of DDT, the aldrin-toxaphene group, and many materials recently placed in commercial volume more than offset the reduced output of benzene hexachloride, copper sulfate, 2,4-D, and 2,4,5-T. Supplies of insecticides, fungicides and weed killers are expected to be ample in 1959. Early season demand is reported in larger volume this year than last year.

Price Trends

Advanced

None

Reduced

Dried blood, Chicago, 75c. per unit ton.
Tankage, Chicago, 25c. per unit ton.
New York, 25c. per unit ton.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	June 6, 1958
111.86	112.02	112.08	109.16

For Current Prices see page 9

Animal and Plant Foods

Ammonia—Production of synthetic, anhydrous ammonia in March amounted to 384,128 short tons as against 326,454 tons in the previous month, according to report of the Department of Commerce. Stocks at producing plants in March totaled 186,505 short tons as compared with 236,344 in the foregoing month.

Ammonium Nitrate — A producer announced price schedules to be effective for the period of August, 1959, through July, 1960. In August, ammonium nitrate will be reduced $5 per ton to $63 which, sources point out, is in keeping with a longstanding policy of lower prices in the off-season to stimulate buying. Thereafter, price will advance $1 per ton each month to bring the level to $67 per ton in December. Price will be $68 per ton, f.o.b., works, in the January through July period of 1960, unchanged from the comparable period of 1959.

Department of Commerce reported production of ammonium nitrate, original solution, amounted to 249,724 short tons in March as against 216,428 tons in the previous month. Stocks at producing plants totaled 193,034 short tons in March as compared with 251,722 tons in February.

Animal Protein — Dried blood, New York, was steady at $8.25 per unit ton, while quotations in the Chicago district dropped sharply from $6.75 to $6 per unit ton.

Tankage, New York, declined 25c. to $6 per unit ton. Listing at Chicago also dropped 25c. to $6.50 per unit ton. Bonemeal was steady at $75 per ton, East coast, unchanged from quotation long in effect. Hoofmeal was likewise unchanged, interest moderate. Nitrogenous tankage was quoted at $4 per unit ton, nominal.

Nitrogen Solutions—A major producer reported that the current price on nitrogen solutions, $120 per ton, would be continued through September. For the fourth quarter, price will advance to $124 per ton. In the heavy shipping season, January through June, 1960, price will move up to $128 per ton in comparison to the $120 price held this year during that period.

A resumption of the steady growth of nitrogen products is indicated by the spot shortages which have occurred during the current planting season, the company said. It was pointed out that nitrogen prices today are practically the same as those of 1940, while other products bought by farmers have increased many times.

Superphosphate —A producer recently announced that equipment for continuous production of superphosphate at a rate of 100 tons per hour had been installed at the company's Baltimore works. The new installation replaces six batch-type units and was said to produce a better product as well as being more economical.

Potash—There were no price developments in this market at the close of the week. Listings for the new season were out by the first of June last year.

Sales and apparent consumption of potassium salts in the United States in 1958 increased 10 percent over 1957, although production of marketable potassium salts declined from 1957's record high, according to report of the Bureau of Mines. Stocks in producers' hands at the end of 1958 were 33 percent less than at the close of 1957.

Imports of potash materials were up 18 percent last year over the previous year, while exports were 8 percent higher, the Bureau said.

World output was increased to 8.8 million short tons as against 8.7 million in the previous year, and 8.3 million in 1956. The average for the 1949-53 period was 5.8 million short tons.

Pesticides

Calcium Arsenate—Production in 1958 fell off drastically totalling 9,000,000 pounds, compared with 19,478,000 pounds (revised) in 1957 and 27,106,000 pounds in 1956.

DDT—Output in 1958 was boosted to 143,216,000 pounds compared with 124,545,000 pounds in 1957 and 137,659,000 pounds in 1956. DDT usage domestically in 1957-58 totaled 66,700,000 pounds compared with 71,000,000 pounds, the previous season.

This market remained steady with good volume of business passing for prompt delivery. Deliveries to formulators are moving out in sizable quantities. Prices were well held at current levels.

Exports of pesticides in 1958 from the United States were valued at $82,067,000 by the Commodity Stabilization Service, Department of Agriculture. This compared with the total value of $86,002,000 in 1957.

Pyrethrum—Report of the Department of Agriculture says that the use of this material around foods is increasing due to the fact that other effective pesticides cannot be used because of their greater toxicity to man.

Imports last year increased 49 percent over 1957 and appeared to be higher than in any year since 1949. Imports were valued at $3.8 million last year, of which 225,732 pounds was estimated as extract, against 88,030 pounds in 1957. Imports from Yugoslavia have risen steadily during the past three years, from 57,661 pounds of flowers in 1956 and 85,784 pounds in 1957 to 153,948 pounds in 1958.

It was estimated that 135,000 pounds of pyrethrum extract has been disposed of from the national stockpile and announcement has been made of disposal of an additional 66,000 pounds for 1959.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during February and March.

	Feb., 1959	Mar., 1959
DDT	11,422,227	12,628,953
2,4-D*	2,592,620	2,942,141
Ester & Salts	2,775,619	†3,211,399
Acid equivalent	2,076,058	†2,375,723
BHC	1,508,583	—
Gamma isomer	204,647	—
Tetramethylthiuram Sulfides	435,291	372,232
2,4,5-T	502,996	†560,701

* Includes 2,4-D acid produced, separated and consumed in plant in the manufacture of its derivatives.
A dash (—) indicates information was not available for publication.
† Partly estimated.

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Trade Name Chemicals & Specialties

Cationic emulsifiers have found a new commercial market—asphalt paving. Cationic asphalt emulsion offer significant improvements over the anionic emulsions, in use for the past thirty years. Among the limitations of the anionic asphalt emulsions are: their dependence on favorable climatic conditions, the permanency of bond is questionable, the required setting period is long —sometimes a matter of two or three days, and anionic emulsion asphalts are sensitive to the type of aggregate used. Cationic asphalt emulsions avoid such difficulties. These positively charged emulsifiers react with the negatively charged surface to form a permanent bond. Cationic asphalt emulsions set within a matter of hours, they need no special heating equipment, they are not flammable, and cost of application is low.

Enzymes, although not living organisms themselves, are secreted by living tissues such as glands and by organisms such as fungi and bacteria. In some ways, enzymes resemble and behave like catalysts. However, they are not catalysts. Enzymes isolated thus far have all been proteins. Enzyme activity is dependent upon enzyme concentration, substrate concentration, pH range, and temperature. There are thousands of different enzymes due to the fact that they occur in all living cells and may vary with the species.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Chemically Processed Oils

Among the chemically processed oils are natural drying oils which are unsaturated vegetable oils having double or triple bonds. These drying oils are improved by chemical processing. Over and above heat polymerization of the oils, they are processed by the incorporation of chemical additives which improve the drying speed and give film hardness and resistance to water, alkalis, and acid. Among the early modifications, drying oils were treated with maleic anhydride and the like. Among the newest modifications is the copolymerization of a small amount of vinyltoluene with a vegetable drying oil to enhance physical and chemical characteristics and to provide good film performance.

Sperm oils have also proven themselves successful chemically processed oils. Used in cosmetics, soaps, leather and textile treating compounds, they help prevent corrosion, and they resist oxidation. Sperm oils have the affinity for and the ability to wet metallic surfaces, a desirable property for rust proofing compounds. Not soluble in water, sperm oils are miscible with petroleum oils and many organic solvents.

Archer-Daniels-Midland Company offers a number of sperm oil products. Two of these are **"Liquid Cosmol"** and **"Cosmol 1000."** Both are composed of higher fatty alcohol esters of higher fatty acids. ADM states that the higher alcohol and the fatty acid portion of the esters of **"Liquid Cosmol"** contain one double bond or are monosaturated. It is classified as a technical grade of oleyl oleate.

Light in color and almost odorless, ADM's **"Liquid Cosmol"** can be saponified and it forms stable emulsions. It is said to produce lighter colored sulfonated or sulfated products than natural sperm oil. Actually a liquid wax, **"Liquid Cosmol"** possesses properties of a fatty oil as well. It is miscible with fatty oils and petroleum oils.

ADM's **"Cosmol 1000"** is similar to **"Liquid Cosmol"** in structure, but it is hydrogenated, and is a technical grade of stearyl stearate. All triglycerides have been removed from it as well. **"Cosmol 1000"** is said to be more soluble in mineral oil and most solvents than other saturated fats, it forms stable emulsions, and when saponified with alkali, the alcohols will be dispersed throughout the soap medium.

"Keltrol 1059" is a vinyltoluene drying oil copolymer in odorless mineral spirits marketed by Spencer Kellogg & Sons, Inc. It has been tailored to produce high quality flat wall paints at minimum price. Among its properties, **"Keltrol 1059"** is said to have excellent color uniformity over a wide range of porous surfaces, and there is the minimum of lingering after odor. Also, there is good nonpenetration.

Spencer Kellogg describes **"Keltrol 1059"** as being a very soft thixotropic gel that needs no special application equipment. **"Keltrol 1059"** flat wall paints are characterized by good working properties with brush or roller, excellent wet edge properties, good flow and leveling, stain removal, color rentention, and color and sheen uniformity comparable to the best of alkyd vehicles.

Emulsions & Latexes

The acceptance of asphalt emulsions has grown steadily in the past few years. Until recently, however, these emulsions have been solely of the anionic type which have definite shortcomings. Among the disadvantages, the anionic emulsions take a fairly long time to set, sometimes as long as two to three days. Also, the success of the emulsions depends upon favorable weather conditions. For example, heavy rains can wash off part of the asphalt. Further drawbacks include the fact that anionic asphalt emulsons require soft or demineralized water, and the asphalt is more sensitive to the type of stone used as the aggregate. The anionics appear to work well with limestone, but silica-type gravels may present problems.

These difficulties have been overcome by the development of cationic asphalt emulsions which function by an entirely different mechanism. They work well with a wider range of aggregates, including silica types. The reason for this is that cationics (positively charged in solutions) orient themselves on negatively charged asphalt surfaces so that the hydrophobic portion is dissolved in asphalt with the positively-charged polar groups facing away from the asphalt. The polar groups are in turn strongly attracted to any negatively-charged surface and become firmly attached. Thus, after application of the aggregate, the cationic asphalt emulsions will deposit out rapidly. Even when wet stone is used or weather is unfavorable, the cationic emulsions will adhere to a surface. Furthermore, the cationic asphalt emulsions can be used with either soft or hard water.

Armour Chemical Division of Armour & Co., have a group of N-alkyl trimethylene diamines trade named **"Duomeens."** One of this line of cationic emulsifiers is **"Duomeen T,"** a tallow diamine with an alkyl chain containing 16 to 18 carbons—or, in other words, a palmitic, stearic or oleic group.

According to Armour, **"Duomeen T"** uncompounded is an excellent additive for use on acidic siliceous aggregate at concentrations of 0.3 to 1.0 percent. This tallow derivative has been on the market for a number of years, used recently in germicides, ore flotation, water treatment, and plastics and rubber. The use of Armour's **"Duomeens"** as cationic emulsifiers is now becoming popular commercially. Armour states that it makes only the emulsifiers, not the asphalt emulsions.

Also on the market, are Armour's **"Ethoduomeens"** for situations requiring a slow-setting asphalt. One of this line of tallow diamines, which are condensed with two, three, five, or ten moles of ethylene oxide, is **"Ethoduomeen T."** According to Armour, **"Ethoduomeen T"** breaks more slowly at the same time that

—Continued on page 43

Aliphatic Organics

Major producers last week put through price reductions ranging from ¼ cent to 1 cent per pound for methylene chloride. Action established the schedule to direct consumers at 12¼ cents per pound tankcars; 12½ cents tanktrucks (2,000 gallon minimum shipment); and at 13½ cents per pound drum car and truckloads. Similarly revised, prices to distributors now range from 11.85 cents per pound for tankcars to 14¾ cents for small quantities in drums. No official reason was given for the price cut but the most logical motive appeared to be import competition and the possible accumulation of outsize inventories of domestic product.

A leading importer of methylene chloride had taken no action on prices by presstime but a spokesman for the firm—in a midweek conversation with OPD—indicated that reductions in line with those announced by the US makers probably would be made shortly. In other words, one can expect that the long-held ½ cent per pound differential between imported and domestic schedules will be maintained. It is necessary to point out that this importer, not unlike his US counterparts abroad, offers customers a steady source of supply by maintaining bulk stocks here, and is definitely not of the in-again-out-again class of traders.

Also last week, a leading producer announced that it would advance less carload prices ½ cent per pound, effective July 1, for 40 products in two major base lines, ethylene oxide derivatives and propylene oxide and its derivatives. These products include the industrial ethylene glycols (excluding antifreeze), propylene glycols, ethanolamines, isopropanolamines, polyethylene glycols and propylene oxide.

With the revision, the firm will raise prices on less carload shipments from 1 cent to 1½ cents over the carload prices. This 1½ cent differential, introduced at the beginning of the year for a group of esters and ketones, is steadily becoming an accepted industry pricing pattern.

Coming up July 1, according to some trade people, is a formaldehyde price advance. This rumor, of course, is anything but new. Major reason for its revival—it had been squelched by reports that October 1 appeared to be the more likely date for such a move—is that the methanol market has not been adversely affected by the higher prices posted April 1.

The report that Cuba is going to keep the largest percentage of its 1958-59 blackstrap molasses crop, bucking an age-old pattern, elicited a variety of comments from trade members. Some people remarked that the announcement was probably a propaganda move to bolster sagging prices. Others, noting that Cuba intends to use some of the molasses in alcohol production, thought that the "bearded isle" may have found customers somewhere in the known world for its increased alcohol output. Not here, of course—an impossibility more or less with the duty at 7½ cents per gallon.

Price Trends

Advanced
None

Reduced
Methylene chloride, t.c., ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 6, 1958
130.49	130.50	130.57	131.12

For Current Prices see page 9

Butadiene—Producers of butadiene who have long complained about excess plant capacity can take courage from recent reports that the day is nearing when synthetic rubber will dominate two-thirds of the overall market.

In 1958, consumption of synthetic rubber, major outlet for butadiene, amounted to 1,230,000 tons, up from 1,062,000 four years earlier. And according to recent trade estimates, the '58 figure should be surpassed by a considerable margin in '59.

Consumption of natural rubber is also climbing but at a considerably slower rate. At 1,880,000 tons in '55, consumption last year totaled 1,985,000 tons to maintain the largest share of the market.

On a world-wide basis, it's said, there are two developments that should spur synthetic rubber demand, and thus help to bridge the gap between plant capacity and actual production of butadiene.

The first of these is the construction of an increasingly large number of synthetic rubber facilities abroad. The second: the likely development of a synthetic material that will open up a market previously denied the synthetic rubber manufacturer—big and very costly airplane and truck tires.

Its' said that synthetic rubber dominates one-third of the US market, the natural material one-third, and the remaining third is opened to the lowest priced material of the two.

Natural rubber's third consists mainly of heavy-duty airplane and truck tires for the simple reason that it alone provides the necessary heat resistance and resilience properties.

But the day may not be far off when these properties can be duplicated by the scientists. Already, research has come up with a "synthetic natural" rubber, so-called because it has the same molecular structure as the natural material, and it seems likely that further research will find a way to build in the requisite degree of heat resistance and resilience. At least it's on the likelihood of such a development that predictions for the entrance of synthetic rubber into the big tire market are based.

Methylene Chloride—Major producers last week announced price reductions ranging from ¼c. to 1c. per pound for methylene chloride. Separate schedules were established for consumers and distributors with the effective date June 3.

To consumers, the new schedule, on a

Aliphatics Foreign Trade: March

Exports and imports of selected industrial aliphatic organics for the months of February and March, 1959, as reported by the Bureau of Census were as follows:

		March	February
EXPORTS			
Acetone	lbs.	846,463	655,431
Butyl acetate	lbs.	264,603	572,410
Butyl alcohol	lbs.	2,436,610	433,024
Ethyl alcohol and methylated spirits	gals.	763	1,044
Ethylene Glycol	lbs.	6,827,374	17,064,226
Glycerine, 100 percent basis	lbs.	636,229	944,825
Methyl alcohol	gals.	1,453,338	561,929
Methyl ethyl ketone and methyl acetone	lbs.	972,488	514,932
Propyl alcohols	lbs.	1,766,580	191,876
IMPORTS			
Acetic acid (over 65 percent)	lbs.	308,540	164,073
Acetic anhydride	lbs.	19,950	404,760
Acetone, MEK and homologues	lbs.	32,868	9
Amyl alcohol and fusel oil	lbs.	2,889	6,560
Chloroacetic acid (mono and tri)	lbs.	1,511,064	862,273
Formic acid	lbs.	88,448	200,213
Glycerine, crude	lbs.	445,951	1,318,173
Glycols, their ethers and esters	lbs.	13,382	250
Lactic acid (55 percent or more by weight)	lbs	403	9,970
Tetrachloroethane	lbs.	0	0
Trichloroethylene	lbs.	3,438,955	1,357,814
Vinyl acetate, unpolymerized	lbs.	2,424,200	3,902,920
Vinyl alcohol, including derivatives	lbs.	775,640	1,653,906

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Aliphatic Organics

delivered basis, is: tankcars (4,000 gallons minimum) 12¼c. per pound; tanktrucks, maximum shipment of 2,000 gallons, 12½c.; tanktrucks, 1,000 gallons minimum, 13¼c.; drums, carloads or truckloads 13½c.; and less car or truckload quantities, 15¾c. per pound.

To distributors: tankcars 11.85c. per pound; tankwagons (1,000 gallons minimum) 12.85c.; drums, car and truckloads, 12.95c.; less car-or truckloads 14¾c. per pound.

No hard and fast statements were made by any of the producers posting the reduced prices as to the reason for the action. It was intimated by several trade sources, however, that import competition has been quite keen and that domestic inventories, as a result, may be growing at too fast a rate.

A major importer, who conducts his business in much the same manner as his domestic competitors by offering a steady source of supply from bulk stocks here, had taken no action on prices by press-time last week. Spokesman for the firm did indicate—in a midweek conversation with OPD—that his firm more than likely would drop prices in order to maintain the long-held ½c. per pound differential between domestic and imported schedules.

Methylene chloride is a chemical of diverse applications, many of which are said to be still in the development stage. Among the large volume users are manufacturers of films, aerosols, refrigerants, non-flammable paint removers, and to a lesser extent the textile trade.

Demand particularly from refrigerant and aerosol makers is reported especially brisk, due to the seasonal rise in activity in these fields.

Molasses—Markets for feeding cane molasses were mixed in southern and midwestern states during the week ended June 2. Indications of both weakness and strength were present, Agricultural Marketing Service reported.

Demand showed little change, being slow in the South to moderate in northwestern states. At New Orleans, the "mostly price" declined ¼ cent to 11.75c. per gallon. On the other hand, a blackstrap distributor was asking 1½c. per gallon more than the preceding week, based on cost of imported supplies.

The Cuban National Association of Sugar Growers announced that this season's raw sugar production through May 12 amounted to 5.3 million Spanish long tons, compared to 5.4 million as of the same date last year.

Production of sugar this season is over 90 percent completed. Trade reports, AMS said, indicate that blackstrap molasses yields per ton of sugar produced continue well above last year's.

Perchloroethylene—Demand for perchloroethylene is seasonally slow, reflecting, of course, the increasing popularity of wash and wear clothing, which keeps the dry cleaning shops working at a slow pace during the summer months. More active interest can be expected toward summer's end, sources say.

Supplies of perchloroethylene, for some time now the most widely-used of the dry cleaning solvents, are fully adequate. Dual source of material, domestic production as well as large volume of imports, continues to keep the market highly competitive. Thus far, however, US makers have made no move to lower prices; in fact, rumors to that effect, quite loud some time back, appear to have died out completely.

Triethanolamine Lauryl Sulfate—The schedule is called firm at 22c. per pound tankcars, 24½c. per pound drum carloads, and 25½c. less carloads, all on a delivered basis. Most recent price change occurred January 1 when listings were boosted uniformly 1½c.

Triethanolamine lauryl sulfate is widely used in the manufacture of clear shampoos because of its low cloud point and good foaming properties. Demand is reported steady, supplies ample and promptly available.

Fertilizer-of-Future

—Continued from page 7

president of the institute, will be the first speaker June 15 when he gives a brief progress report on the organization's activities. His talk will be followed by a panel discussion on "NPFI on the Move" with Dr. Russell Coleman, executive vice-president of the institute, as the moderator.

Panel speakers will include: Dr. Richard B. Bahme, western regional director, on "Spreading the Word About Fertilizer"; Zenas H. Beers, midwest regional director, on "Raising Farmers' Sights"; Dr. Samuel L. Tisdale, southeast regional director, on "The Intensified Approach to the Fertilizer Market," all representing the institute.

Dr. R. A. King, professor in the department of agricultural economics at North Carolina State University, and Dr. M. S. Williams, chief agricultural economist for the institute, will discuss "Predicting Next Year's Fertilizer Sales" as part of the panel.

The June 15 afternoon program will be "Fertilization in the Future" with W. R. Allstetter, vice-president of the institute, as moderator and speakers as follows: Dr. L. D. Baver, director of the experiment station of the Hawaiian Sugar Planters' Association, Honolulu, on "Scientific Feeding of High Value Crops"; Dr. J. Fielding Reed, southern manager of the American Potash Institute, on "Converting Low Value Crops into High Value Crops"; and Dr. R. J. Hildreth, research coordinator for west Texas in the Texas Agricultural Experiment Station, on "Minimizing Weather Risks with Fertilizer."

The June 16 program will begin with the showing of the institute's new film, "Cash in on Grass" followed by addresses on "What's Happening Down on the Farm" by Earl F. Crouse, Farm Business Council, Urbana, Ill., and "What's Happening in Federal Farm Programs" by Rep. Whitten.

The annual banquet of the institute will be held on Tuesday evening.

President Puts Three Drugs Under Narcotic Law Control

Three new synthetically produced drugs, each of which has been found to have addiction-forming or addiction-sustaining liability similar to morphine, were placed under control of the federal narcotic law by a proclamation of President Eisenhower last week.

The three drugs are described as:

2' - Hydroxy-5,9 - dimethyl-2- (2-phenylethyl)-6,7-benzomorphan.

Ethyl 4-phenyl-1-[3 -(phenylamino) - propyl]-4-piperidinecarboxylate.

3-Hydroxy - N - phenethylmorphinan, its racemic and levorotatory forms, but excepting its dextro-rotatory forms and its salts.

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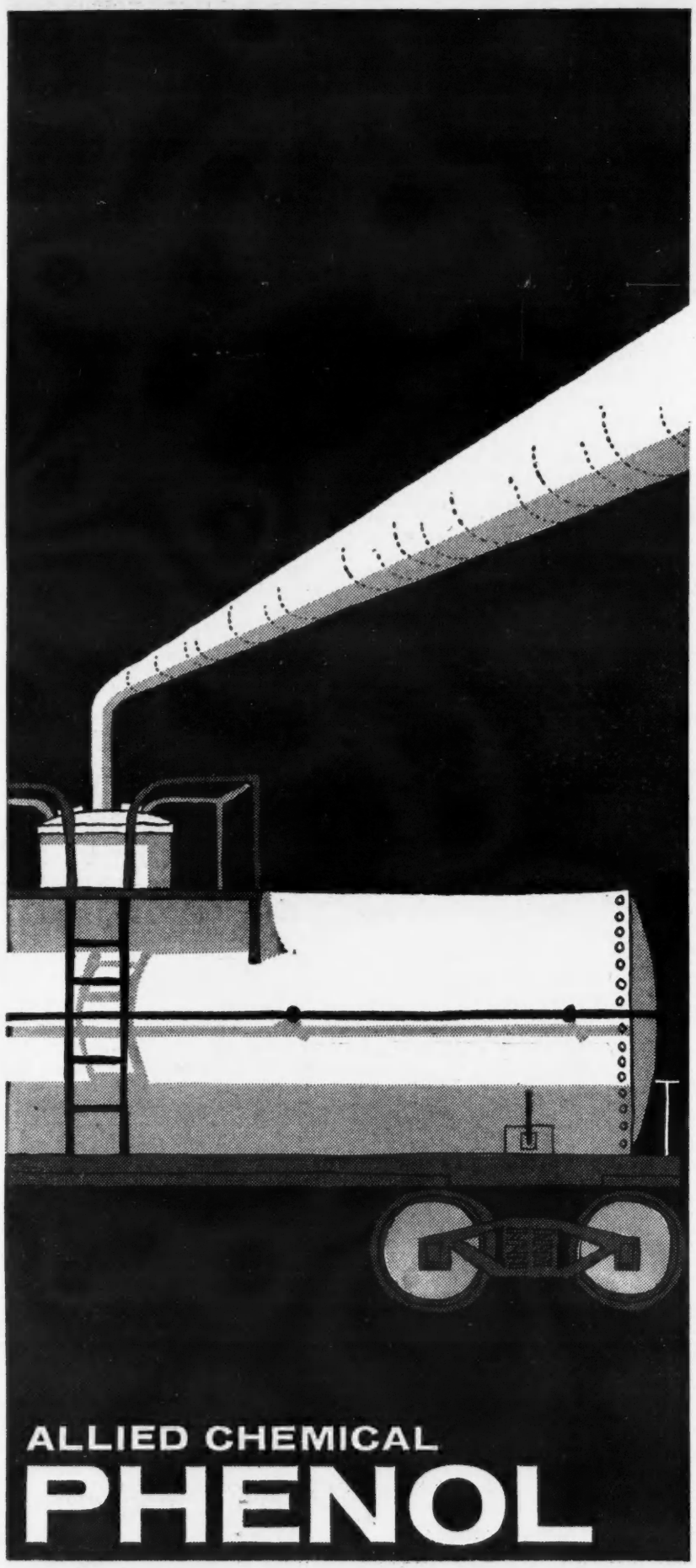
160 bgs, Asbestos Products Corp, Lourenco Marques
400 bgs, Davies Turner & Co, Durban
100 bgs, Asbestos Products Corp, Durban
800 bgs, N American Asbestos Corp, Capetown
800 bgs, Bankers Trust Co, Lourenco Marques
ASCORBIC ACID—20 dms, Afran Chemical Products, Rotterdam
12 bbls, Gyma Lab, Antwerp
BARIUM CARBONATE—6,000 bgs, World Bulk Shipping, Rotterdam
BARIUM CHLORIDE—330 bgs, Independent Chemical Corp, Hamburg
BEESWAX—25 bgs, Machado & Co, Ciudad Trujillo
89 bgs, E Vadillo Ruiz, Santiago
190 bgs, International Commodities Corp, Valparaiso
288 bgs, Manufacturers Trust Co, Lisbon
55 bgs, Tampico
32 bgs, Petit Goave
BENZOSULFIMIDE—40 dms, Chemical Bank, Yokohama
BISMUTH—323 bgs, Antofagasta
BLANC FIXE—580 bgs, C J Osborn Co, Rotterdam
BOIS DE ROSE OIL—4 dms, Hollander Trading Corp, Callao
BONE—166 bgs, International Packers Ltd, Santos
CAFFEINE ALKALOID—25 dms, Woodward & Dickerson, Rotterdam
CALCIUM CARBONATE—600 bgs, Pluess Staufer, Antwerp
1,000 bgs, Smith Chemical & Color Co, Hull
1,200 bgs, Antwerp
CAMPHOR POWDER, SYNTHETIC—224 cs, P H Petry, London
CANANGA OIL—2 dms, Rotterdam
CARAWAY OIL—3 dms, Rotterdam
CARAWAY SEED—150 bls, Levy & Levis Co, Rotterdam
50 bgs, R J Spitz, Rotterdam
200 bgs, Rotterdam
CARBON BLACK—50 bgs, Kores Manufacturing Corp, Bremen
CARDAMOMS—10 cs, Wm E Martin & Sons, Stockholm
CARNAUBA WAX—613 bgs, Frank B Ross, Fortaleza
224 bgs, M Hassel & Co, Fortaleza
112 bgs, J W Hanson & Co, Fortaleza
111 bgs, M Argueso & Co, Fortaleza
207 bgs, S C Johnson & Son, Fortaleza
CASEIN—300 bgs, Milwaukee Spice Mills, Rotterdam
1,000 bgs, J R Spellacy, Melbourne
2,000 bgs, Eugenio Lang, Buenos Aires
200 bgs, Chase Manhattan Bank, Buenos Aires
1,000 bgs, F C Gerisch, Buenos Aires
1,491 bgs, F H Paul & Stein Bros, Oslo
CASSIA—59 bls, Jacoberg Overseas Inc, Djakarta
CASTOR BEANS—1,828 bgs, Hollander Trading Corp, Port de Paix
127 bgs, Hollander Trading Corp, Cap Haitien
1,846 bgs, Woodward & Dickerson, Montevideo
CAUSTIC SODA—490 dms, B T Chemco Inc, Gothenburg
CHICACO ACID—12 dms, Atlantic Chemical Corp, Rotterdam
CHLORAL HYDRATE—50 kgs, Gallard Schlesinger, Liverpool
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMON QUILLS—100 bls, Manufacturers Trust Co, Colombo
CITRONELLA OIL—25 dms, Givaudan Corp, Hamburg
CLOVES—50 bgs, Irving Trust Co, Tamatave
200 bgs, Karl H Landes & E Balint, Zanzibar
500 bgs, National City Bank, Zanzibar
300 bgs, Zanzibar
100 bgs, Tamatave
CLOVE OIL—62 dms, Fritzsche Bros, Tamatave
38 dms, Tamatave
COCONUT OIL—937 tons, L A Ferm Co, Rotterdam
40 tons, E F Drew & Co, Rotterdam
375 tons, American Trust Co, Cebu
301 tons, Pacific Vegetable Oil Corp, Copenhagen
COCONUT OIL, HYDROGENATED—188 tons, Falck Products Co, Rotterdam
CODLIVER MEAL—400 bgs, Dyson Shipping Co, Reykjavik
CODLIVER OIL—100 dms, Peder Devold Oil Co, Reykjavik
70 dms, Arista Oil Products Co, Reykjavik
34 tons, Dyson Shipping Co, Reykjavik
COPAL GUM—50 bgs, Morningstar Paisley Inc, Dakar
CORIANDER SEED—200 bgs, Transit Export & Import Corp, Casablanca
CORN STARCH—400 bgs, Manhattan Adhesives Corp, Antwerp
448 bgs, Rotterdam
650 bgs, Antwerp
CUTTLEFISH BONE—100 cs, D Young, Kobe
DAMMAR GUM—56 bgs, O G Innes Corp, Tandjong Priok
50 cs, S Winterbourne & Co, Bangkok
DEGRAS—107 dms, N I Malmstrom, Rotterdam
50 dms, N I Malmstrom, Manchester
60 dms, N I Malmstrom, Liverpool
25 dms, Midwest Overseas Trading Corp, Liverpool
52 dms, N I Malmstrom, Port Adelaide
DEXTRIN—400 bgs, Stein Hall & Co, Rotterdam
DICHLOROETHANE—1 dm, Acelo Chemical Co, Liverpool
DYES, COAL TAR—15 dms, Toms River Cincinnati Chemical Corp, Rotterdam
142 dms, Hensel Bruckmann & Lorbacher, Rotterdam
147 dms, Rotterdam
EARTH COLORS—1,000 bgs, Naftone Inc, Rotterdam
1,975 bgs, Naftone Inc, Bremen
10 cns, United Ultramarine & Chemical Co, Rotterdam
220 bgs, Rotterdam
EPSOM SALT—100 bgs, Catruna & Vincent Co, Liverpool
ETHYLENE GLYCOL—3 cs, Havre
FENNEL SEED—308 bgs, M J Gotombeck, Bombay
85 bgs, Karl H Landes & E Balint, Bombay
50 bgs, S B Penick & Co, Bombay
FISHLIVER OIL—3 dms, Arista Oil Products Co, Yokohama
FUEL OIL—273,000 bbls, Esso Standard Oil Co, Aruba
724,603 bbls, Esso Standard Oil Co, Las Piedras
117,201 bbls, Hess Inc, Punta Cardon
103,007 bbls, Atlantic Refining Co, Havana
99,430 bbls, Shell Caribbean Petroleum Co, Punta Cardon
100,425 bbls, Shell Caribbean Petroleum Co, San Lorenzo
FURFURAL—2,352 tons, E I duPont de Nemours & Co, La Romana
GALL—4 dms, Van Geider Fanto Corp, Sydney
GALLNUTS—68 bgs, Istanbul
GARLIC OIL—3 cs, Magnus Mabee & Reynard, Yokohama
GELATINE—100 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
100 bgs, Medico Chemical Corp, Rotterdam
336 bgs, Manhattan Adhesives Corp, Antwerp
3 bbls, Coignet Chemical Co, Antwerp
100 bgs, Bank of N Y, Hamburg
GERANIUM OIL—3 dms, Centflor Manufacturing Co, Tamatave
1 cm, L A Champon & Co, Tamatave
3 dms, Fritzsche Bros, Tamatave
6 dms, J Manheimer, Tamatave
GHATTI GUM—11 bgs, Dingelstedt & Co, Bombay
57 bgs, Morningstar Paisley Inc, Bombay
57 bgs, Colony Import & Export Corp, Bombay
GINGER—22 bgs, Karl H Landes & E Balint, Kingston
30 bgs, Van Loan & Co, Kingston
183 bgs, Fritzsche Bros, Kingston
GRAPHITE—3,250 bgs, C Pettinos, Tamatave
250 bgs, Asbury Graphite Mills, Tamatave
250 bgs, J E Pother Co, Tamatave
250 bgs, Tamatave
GUAR GUM—50 bgs, Paul A Dunkel, Rotterdam
50 bgs, Guaranty Trust Co, Rotterdam
100 bgs, Duche Uni Gum Corp, Rotterdam
GYPSUM—300 bgs, C B Chrystal Co, Hull
201 bgs, Whittaker Clark & Daniels, Liverpool
GYPSUM, CRUDE—3,268 tons, Allied Chemical Corp, Halifax
16,814 tons, U S Cypsum Co, Little Narrows
10,344 tons, U S Gypsum Co, Hantsport
IRON BLUE—26 dms, Van Oppen & Co, Liverpool
IRON OXIDE—1,400 bgs, London
IRON OXIDE, YELLOW—40 bgs, Whittaker Clark & Daniels, Hull
JUNIPER BERRIES—171 bgs, Leghorn
KARAYA GUM—245 bgs, Morningstar Paisley Inc, Bombay
154 bgs, Colony Import & Export Corp, Bombay
79 bgs, Max Van Pels, Bombay
60 bgs, Paul A Dunkel, Bombay
77 bgs, Stein Hall & Co, Bombay
KOLA NUTS—400 bgs, D Steengrafe & Co, Kingston
454 bgs, Lagos
LACTIC ACID—6 cjns, E F Drew & Co, Hamburg
LAUREL LEAVES—150 bls, Louis Furth, Izmir
LAVENDER OIL, SPIKE—2 dms, Flora Essential Oils Co, London
LEMON PEEL—3 bls, Meer Corp, Alicante
LICORICE EXTRACT—668 cs, Wm E Martin & Sons, Izmir
LIME OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
LIVERMEAL—448 bgs, Tupman Thurlow, Melbourne
LOCUST BEAN GUM—50 bgs, Duche Uni Gum Corp, Rotterdam
200 bgs, Paul A Dunkel, Rotterdam
300 bgs, Stein Hall & Co, Liverpool
300 bgs, Irving Trust Co, Lisbon
1,200 bgs, Morningstar Paisley Inc, Piraeus
LOGWOOD EXTRACT—700 cks, American Dyewood Co, Kingston
LYCOPODIUM—5 dms, Max Van Pels, Hamburg
MAGNESITE—845 bgs, Cochin
MAGNESIUM CARBONATE—80 cs, H A Gogarty, Antwerp
MAGNESIUM HYDROXIDE—40 bgs, Reheis Co, Liverpool
MANGROVE BARK—511 bgs, Bowring & Co, Beira
MANGROVE EXTRACT—200 bgs, Saxe Cutch Corp, Singapore
MELAMINE—20 bgs, Orlex Dyes & Chemical Corp, Gothenburg
MENTHOL—50 cs, Lo Curto & Funk, Santos
14 dms, Fritzsche Bros, Buenos Aires
70 cs, Magnus Mabee & Reynard, Santos
25 cs, Santos
MERCURY—150 flks, Callao
MOLASSES—585 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—900 dms, International Selling Corp, Marseille
MUSK, ARTIFICIAL—4 dms, Roure-Dupont Inc, Rotterdam
MUSTARD SEED—300 bgs, C Gulden, Copenhagen
700 bgs, Louis Furth, Copenhagen
MYROBALANS EXTRACT—40 bgs, Olsen Importing Co, Liverpool
MYRRH GUM—14 bgs, F D Keller & Son, Aden
NAPHTHALENE—1,687 bgs, J N Forker, Liverpool
1,573 bgs, J N Forker, London
1,112 bgs, Antwerp
NAPHTHOL—3 dms, Hensel Bruckmann & Lorbacher, Hamburg
NITROCELLULOSE POWDER—10 cs, Francenia Industries, Bremen
NUTMEG—112 bgs, National City Bank, Colombo
70 bgs, Karl H Landes & E Balint, Singapore
25 bgs, Catz American Co, Djakarta
70 bgs, East India Trading Co, Singapore
42 bgs, H J Spitz, Singapore
35 bgs, Singapore
OITICICA OIL—250 tons, Brazilian Industrial Oils Inc, Fortaleza
OLIBANUM GUM—300 bgs, National City Bank, Aden
100 bgs, Fritzsche Bros, Aden
OLIVE OIL—50 dms, J Nicolaou Co, Algiers
50 dms, Uddo & Taormina Co, Algiers
2:3 dms, Smith Weihman Co, Algiers
50 dms, National City Bank, Seville
25 dms, N Y Trust Co, Seville
ORANGE PEEL—36 bls, Meer Corp, Alicante
OXBILE—4 dms, Merck & Co, Durban
PALM OIL—404 tons, Balfour Guthrie, Matadi
PALMAROSA OIL—4 pots, J Manheimer, Bombay
PALMKERNEL OIL—222 dms, B M T Commodity Corp, Rotterdam
150 cs, B M T Commodity Corp, Rotterdam
300 tons, Durkee Foods, Rotterdam
195 tons, Les Foods inc, Matadi
298 tons, Matadi
PAPAIN—50 cs, Kemo Shipping Co, Mombasa
20 cs, National City Bank, Dares Salaam
10 cs, Matadi
PAPRIKA—150 bgs, Schoenfeld & Sons, Hamburg
PATCHOULI OIL—18 dms, Antoine Chris Co, Penang
10 dms, National City Bank, Penang
PEATMOSS—1,000 bls, Swiss Bank, Bremen
2,320 bls, Marine Midland Trust Co, Bremen
3,300 bls, Marine Midland Trust Co, Hamburg
750 bls, Bruco Peatmoss Corp, Bremen
850 bls, Bruco Peatmoss Corp, Hamburg
3,000 bls, Garden Supply Co, Bremen
3,310 bls, C Pallard, Bremen
3,430 bls, E J Lang, Bremen
5,500 bls, E J Lang, Hamburg
2,300 bls, Premier Peatmoss Corp, Hamburg
2,150 bls, Premier Peatmoss Corp, Bremen
905 bls, Premier Peatmoss Corp, Gdynia
1,500 bls, E Dunwoody, Bremen
500 bls, Ascot Peatmoss Corp, Hamburg
500 bls, New Amsterdam Import Co, Bremen
203 bls, New Amsterdam Import Co, Aarhus
PEPPER, BLACK—469 bgs, A G Dunn, Singapore
315 bgs, M J Gotombeck, Singapore
46 bgs, Max Van Pels, Singapore
2.0 bgs, Internatio Rotterdam, Singapore
2.0 bgs, Ludwig Mueller, Singapore
500 bgs, C A Van Sillevoldt, Rotterdam
233 bgs, J F Frank, Singapore
2,324 bgs, Singapore
150 bgs, Cochin
PEPPER, WHITE—140 bgs, A W Gunn, Singapore
70 bgs, Karl H Landes & E Balint, Singapore
70 bgs, Singapore
PERCHLOROETHYLENE—150 dms, International Selling Corp, Marseille
PETITGRAIN OIL—11 dms, Wessel Duval & Co, Buenos Aires
11 dms, H Weber & Co, Buenos Aires
PETROLEUM, CRUDE—136,606 bbls, Hess Inc, Punta Cardon
273,516 bbls, California Oil Co, Sidon
269,998 bbls, Phillips Petroleum Co, Puerto La Cruz
150,000 bbls, Suntide Refining Co, Puerto La Cruz
45,000 bbls, Mobil Oil Co, Puerto La Cruz
PIMENTO LEAF OIL—1 dm, Lo Curto & Funk, Kingston
POLYETHYLENE CLYCOL—6 cks, Havre
POLYVINYL ACETATE RESIN—535 bgs, G G Lippelgoes, Kobe
POPPYSEED—150 bgs, Levy & Levis Co, Rotterdam
50 bgs, R J Spitz, Rotterdam
200 bgs, Rotterdam
POTASH, CAUSTIC—414 dms, B T Chemco Inc, Gothenburg
POTASSIUM BICARBONATE—32 bgs, James E Fox & Co, Rotterdam
20 bgs, Rotterdam
POTASSIUM FERROCYANIDE—300 bgs, Filo Color & Chemical Co, Rotterdam
POTASSIUM NITRATE—1,000 bgs, Philipp Bros Chemicals, Hamburg
POTASSIUM PERCHLORATE—50 dms, Orlex Dyes & Chemicals Corp, Gothenburg
POTATO STARCH—200 bgs, Oskar Eismann, Rotterdam
100 bgs, B Westergaard, Copenhagen
PRUSSIAN BLUE—3 dms, Tar Residuals Inc, Rotterdam
60 dms, Smith Chemical & Color Co, Rotterdam
61 dms, Transatlantic Pigment Corp, Rotterdam
PSYLLIUM SEED HUSKS—330 bgs, Duchi Uni Gum Corp, Bombay
124 bgs, Meer Corp, Bombay
PYRENE—3 cs, G A Abood Co, Rotterdam
PYRETHRUM EXTRACT—60 dms, Prentiss Drug & Chemical Co, Matadi
50 dms, S B Penick & Co, Mombasa
50 dms, Mombasa
140 dms, Matadi
PYRIDINE 2-ALDEHYDE—1 cs, Schering Corp, Hamburg
PYRITES—404 cks, American Metal Climax, Leixoes
PYRROLIDONE—30 dms, Biddle Sawyer Corp, Rotterdam
20 dms, Rotterdam
QUASSIA CHIPS—750 bgs, S B Penick & Co, Kingston
QUEBRACHO EXTRACT—3,113 bgs, First National Chicago, Buenos Aires
5,150 bgs, International Products Corp, Buenos Aires
380 bgs, Barkey Importing Co, Buenos Aires
RAPESEED OIL—282 tons, Bunge Corp, Karlshamn
RAUWOLFIA ROOT—100 bgs, Meer Corp, Hamburg
RESERPINE—20 dms, Hamburg
RUTILE SAND—1,800 bgs, International Titanium Corp, Brisbane
500 bgs, Lo Curto & Funk, Brisbane
RUTIN—22 dms, S B Penick & Co, Sydney
22 dms, Meer Corp, Sydney
SAGO FLOUR—58 bgs, Morningstar Paisley Inc, Singapore
269 bgs, Manhattan Adhesives Corp, Singapore
553 bgs, Stein Hall & Co, Singapore
SEEDLAC—200 bgs, Wm Zinsser & Co, Calcutta
100 bgs, Gillespie Rogers Pyatt, Calcutta
SESAME OIL—79 dms, I R Boody & Co, Copenhagen
SESAME SEED—1,333 bgs, Independent Halvah & Candies, Salvador
532 bgs, Trade Import Corp, Santos
SHELLAC—75 bgs, F H Paul & Stein Bros, Rotterdam
40 bgs, F H Paul & Stein Bros, Rotterdam
227 bgs, I Levine, Hamburg
100 bgs, C H Timm, Calcutta
100 bgs, Haeuser Shellac Co, Calcutta
300 bgs, Parks Co, Calcutta
442 bgs, Wm Zinsser & Co, Calcutta
SODIUM CARBONATE, MONOHYDRATE—100 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CHLORITE — 20 dms, Hensel Bruckmann & Lorbacher, Bremen
SODIUM CYANIDE—230 dms, Philipp Bros, Chemicals, Rotterdam
395 dms, C Hardy, Havre
SODIUM FERROCYANIDE—800 bgs, Filo Color & Chemical Corp, Liverpool
SODIUM HYDROXYCINNAMATE—21 dms, Havre
SODIUM MONOCHLOROACETATE—24 dms, Antwerp
SODIUM PERBORATE TETRAHYDRATE — 224 bgs, Antwerp
1,102 bgs, Bremen
SPEARMINT OIL—2 dms, Rotterdam
STYRAX GUM—47 cs, S B Penick & Co, Izmir
22 cs, L A Champon & Co, Iskenderun
SULFUR, CRUDE—3,359 tons, E I duPont de Nemours & Co, Coatzacoalcos
TAPIOCA FLOUR—8,000 bgs, Morningstar Paisley Inc, Kohsichang
3,768 bgs, Stein Hall & Co, Kohsichang
2,158 bgs, Geisman & Co, Kohsichang
4,030 bgs, Harry F R Dolan Jr, Kohsichang
TARTARIC ACID—2,730 bgs, Lennardt & Brush, San Feliu de Guixols
TOLU BALSAM—50 cs, Barranquilla
TURMERIC— 85 bgs, A A Sayia, Alleppey
56 bgs, Kingston
ULTRAMARINE BLUE—400 bgs, Whittaker Clark & Daniels, Liverpool
80 bgs, Whittaker Clark & Daniels, Hull
UREA—600 bgs, Rotterdam
VALONIA CUPS—7,921 bgs, Barkey Importing Co, Izmir
VANILLA BEANS—21 cs, Norda Essential Oil & Chemical Co, Vera Cruz
151 cs, Madagascar Agencies, Tamatave
22 cs, J Manheimer, Tamatave
112 cs, Gillespie & Co, Tamatave
45 cs, Morningstar Paisley Inc, Tamatave
11 cs, L A Champon & Co, Semarang
68 cs, L A Carmelou & Co, Tamatave
23 cs, F Huber & Co, Tamatave
114 cs, George Uhe Co, Tamatave
102 cs, Tamatave
VETIVER OIL—2 cs, Ufinindo International Corp, Penang
WATTLE BARK—1,634 bls, Hammond-Carpenter, Durban
2,802 bls, Bowring & Co, Cape Town
570 bls, Hammond & Carpenter, East London
WATTLE EXTRACT—1,631 bgs, Tan American Corp, Durban
ZINC CHLORIDE—42 dms, Riches Nelson, Antwerp
ZINC CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
ZINC OXIDE—400 bgs, D F Young, Liverpool
2,600 bgs, Liverpool
600 bgs, Antwerp
120 bgs, Havre
ZINC YELLOW—100 bgs, Revelli Chemical Co, Antwerp
ZIRCON SAND—5,002 bgs, Lo Curto & Funk, Brisbane
3,000 bgs, International Titanium Corp, Brisbane
1,200 bgs, Overseas Metal & Ore Corp, Brisbane
2,004 bgs, Sydney
ZINC SULFIDE—200 bgs, C J Osborn Co, Rotterdam

Los Angeles

ANTIMONY REGULUS—50 cs, C Gitlan, Antwerp
CASEIN—200 bgs, Borden Chemical Co, Buenos Aires
CASSIA—259 bls, Internatio Rotterdam, Djakarta
386 bls, California Commodities Corp, Djakarta
192 bls, Jacoberg Overseas Inc, Djakarta
98 bgs, Jacoberg Overseas Inc, Amsterdam
CINNAMON QUILLS—25 bls, Hismoco American Co, Colombo
25 bls, Mincing Trading Corp, Colombo
25 bls, W R Grace & Co, Colombo
COPRA—700 tons, American Trust Co, Cebu
74 tons, Cargill Inc, Tabaco
1,016 tons, American Trust Co, Zamboanga
503 tons, Surigao
426 tons, Cebu
COPRA CAKE—2,000 bgs, Balfour Guthrie, Cebu
6,750 bgs, Wilbur Ellis Co, Manila
CORIANDER SEED—100 bgs, Hismoco American Co, Hamburg
CUTTLEFISH BONE—50 cs, Seed & Feeding Corp, Kobe
DEXTRIN—250 bgs, Arabol Manufacturing Co, Amsterdam
EARTH COLORS—2,475 bgs, Naftone Inc, Bremen
400 bgs, American Chemical Corp, Bremen
GELATINE—5 dms, London
MACE—15 cs, Singapore
MAGNESIA—[illegible] bgs, Smith Chemical & Color Co, Rotterdam
MONTAN WAX—100 bgs, Chemical Manufacturing Co, Bremen
PAPRIKA—1,000 bgs, B C Ireland, Hamburg
PEATMOSS—1,000 bls, H V Nootbaar, Bremen
PEPPER, BLACK—175 bgs, Internatio Rotterdam, Singapore

—Continued on page 51



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PLASTICS AND COAL CHEMICALS DIVISION

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Allied Chemical

Coal Chemicals

Heavy consuming demand continued in evidence in large volume coal chemicals markets as the industry moved closer to the expiration date of labor contracts in the steel industry. Perhaps the most critical point was naphthalene and an important derivative, phthalic anhydride. Naphthalene is in a tight supply situation and slated to remain so for the balance of the month at least. Phthalic was reported on allocation generally. Phenol was in good demand. Tariff Commission report for March indicated a combined technical and USP production of phenol of 60.5 million pounds in contrast to the 46 million pounds turned out in March of last year.

The benzene market has continued to thrive as a result of increased operating rates of phenol and styrene makers. As if this was not enough to create a firm tone, there were indications that Russian benzene imports might not be as heavy as last year. However, the majority of sources were not looking for a substantial cutback in imports. It was pointed out that this material has been moving into domestic markets for several years in fairly steady volume.

The American Iron and Steel Institute estimated that steel production in the week ended June 7 would amount to 94.4 percent of theoretical capacity equivalent to 2,674,000 net tons of steel. Output was 2,650,000 tons in the previous week, 2,604,000 in the comparable week one month ago, and 1,685,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 6, 1958
118.54	118.54	118.56	118.12

For Current Prices see page **9**

Basic Products

Benzene—The market has shown good tone during recent months. Stockpiling against a steel strike is less noticeable in this market than in some other coal chemicals markets. Actual consumption has taken a larger slice of production than is generally realized so that output is being taken up in fairly short order, it was said.

Price was slated to remain unchanged. A firming factor on the price front is the indication that imports of Russian benzene may be less than had previously been expected. However, with six months of the year yet to go, the majority of sources were noncommital about a sustained cutback. It was pointed out that this material has been coming into the domestic market in fairly steady volume for a number of years.

Creosote—The market continued unchanged. Use of creosote in wood preserving was estimated to have dropped 19 percent last year, while pentacholorophenol as off 5 percent in 1958.

The volume of wood products treated was the smallest in many years, according to the annual report of Department of Agriculture in cooperation with the American Wood Preservers' Association. Comparison of the 1958 volume with that of 1957 indicated a drop of about 217 million cubic feet, or 21 percent. The number of crossties treated dropped 32 percent to 21 million. Treatment of utility poles declined 16 percent to 5 million. Fence posts were a happy exception, showing an increase of 4 percent in volume to an estimated 22 million posts.

Cresylic Acid—Sources have noted a slight upturn in volume of acids moving into consuming channels. However, the fact remains that tar acids, with the exception of natural phenol, have not shared in the brisk activity noted in other coal chemical markets over the first half of the year.

Naphthalene—The market continued in a tight supply situation which was expected to be sustained until the end of June at least. Looming in the background was a potential strike in the steel industry. Labor contracts will run out at the close of June, and many trade sources regard the current negotiations as the most important since the end of World War II, with management strongly opposed to any further inflationary rise in costs.

Phenol—A 1c. reduction in phenol in early April was having no appreciable effect on volume movement in this market, sources said. Actually, a substantial improvement in tone was noted prior to the decline, which caused some producers to question the advisability of a price drop when the market was on the rise. However, it was also pointed out that improved volume means improved production efficiency and the possibility of shaving prices for advantage in a highly competitive market. Output of synthetic and technical phenol in the first quarter was approximately 30 million pounds more this year than in the comparable period of last year, according to report of the Tariff Commission.

Toluene—The improvement in general business conditions has made some dent in the oversupplied toluene market. However, the fact of just too much production in relation to available market outlets remains one that chemical producers will have to live with for quite some time. Exports of toluene and gallonage retained in the gasoline stream by petroleum sources continued to take the strain off the market. Price was unchanged at the 25c. per gallon level established in the trade for more than a year.

Xylene—Market continued unchanged. Last change in this market was a downward adjustment of ½c. per gallon in the Chicago area to meet a competitive situation. Trade sources contacted reported fairly active demand, stocks fully adequate.

Intermediates

Aniline—Prices in effect for many months were holding steady. The market has continued to show improvement in line with the general upturn in the nation's economy.

Tariff Commission reported production in March amounted to 11,639,525 pounds as against 11,304,514 pounds in the previous month, and 6,440,420 pounds in March, 1958. Output for the first three months of this year was 33,437,581 pounds

Aromatic Chemicals Output: March

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate, as such, and creosote content of solution, on 100%-creosote basis.

	March 1959	March 1958	First Three Months 1959	First Three Months 1958
Benzene ..... gals.	30,251,676	25,216,478	84,636,452	72,829,351
Creosote oil ..... gals.	10,416,730	8,539,770	24,756,402	22,620,241
Creosols, m-p and o-m-p fractions..... lbs.	2,963,795	3,017,760	6,989,645	8,171,492
Cresylic acid, refined, all sources..... lbs.	4,960,296	4,843,109	13,939,509	12,940,332
Dodecylbenzene ..... lbs.	33,861,877	34,138,449	137,133,252	108,655,659
Monochlorobenzene ..... lbs.	46,615,548	33,830,794	122,658,182	97,678,095
Naphthalene, crude ..... lbs.	43,641,462	24,442,849	100,522,682	72,572,360
Phenol, tech and USP ..... lbs.	60,560,860†	46,032,644	164,594,307†	133,642,228
Phthalic anhydride ..... lbs.	34,222,594	27,340,077	87,235,055*	80,143,593
Styrene monomer ..... lbs.	125,371,925	92,629,624	353,308,877	272,035,491
Toluene ..... gals.	20,969,296	15,607,211	58,513,604	42,755,884
Xylene ..... gals.	20,032,454	18,838,436	43,323,935	42,311,225

Source: Bureau of Census.
* Revised.
† Partly estimated.

Coal Chemicals

as against 25,459,845 pounds in the three month period last year, an increase of approximately 24 percent.

Broenner's Acid—Price was quoted at $1.53 per pound, 100 percent activity basis, in drum lots. Movement was routine, stocks fully adequate for trade requirements.

Phthalic Anhydride—A booming second quarter and a tightening in raw material, naphthalene, has led to a tightening of supplies in this market. Sources feel that much of the phthalic moving to consumers has been going into the stockpile. Heavy demand was expected to carry through the balance of the month at least. Price was firm and unchanged from the 17c. per pound level for flaked material in bags, carlot quantity.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended June 7, was as follows:

Ammonium liquor	lbs.	948,179
Ammonium sulfate	lbs.	40,289,291
Benzene	gals.	3,709,542
Coaltar	gals.	22,041,004
Crude chemical oil	gals.	698,658
Solvent naphtha crude heavy solvent	gals.	133,077
Toluene	gals.	898,274
Xylene	gals.	266,155

Styrene Monomer—While there had been substantial hedge buying in anticipation of a rubber strike that was quickly settled, this did not seriously hurt the styrene business, because tire output is running at a very fast rate. Just what the pattern will be for the balance of the year, particularly the second half, is uncertain, whether there is a steel strike or not.

Then, too, it is felt that even if there is a fast strike settlement, or no strike at all, it will be a very slow third quarter. Depending upon what the final labor negotiations settle for, steel costs are likely to go up, and this could result in a price situation that might hurt automotive output.

Tariff Commission reported 1958 production of polybutadiene-styrene, cyclic elastomers amounted to 1,736,175,000 pounds, (elastomer-content basis). Output of other cyclic types, including S-type and for polyurethane, amounted to 16,366,000 pounds during the year. Sales in these two categories totaled 1,546,724,000 pounds and 7,020,000 pounds, respectively, the Commission said.

Koppers Buys Up

—*Continued from page 5*

adjacent plants of Pennsalt and the Wyandotte Chemicals Corporation. Naphthalene will be furnished from other plants of the Koppers tar products division, a large producer of this chemical.

Koppers also has announced plans to equip a development plant in Detroit, Mich., to produce a new type of "sandwich panel" for home construction, utilizing its Dylite expandable polystyrene. The latter plant is expected to be in operation in the last quarter of 1959. Koppers has not previously had any plants in the state of Michigan.

Phosphate Prospector

—*Continued from page 3*

ulations similar to those in effect for potash, sodium and potassium," Sen. Moss notes, "and encourages prospecting by guaranteeing to the prospector that he can lease the phosphate he finds. I believe this legislation will encourage the prospector to search for and develop the phosphate deposits of the west. This improved development should increase taxes for our counties, increase royalties for the states, encourage building of mining and milling facilities and increase employment."

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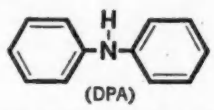

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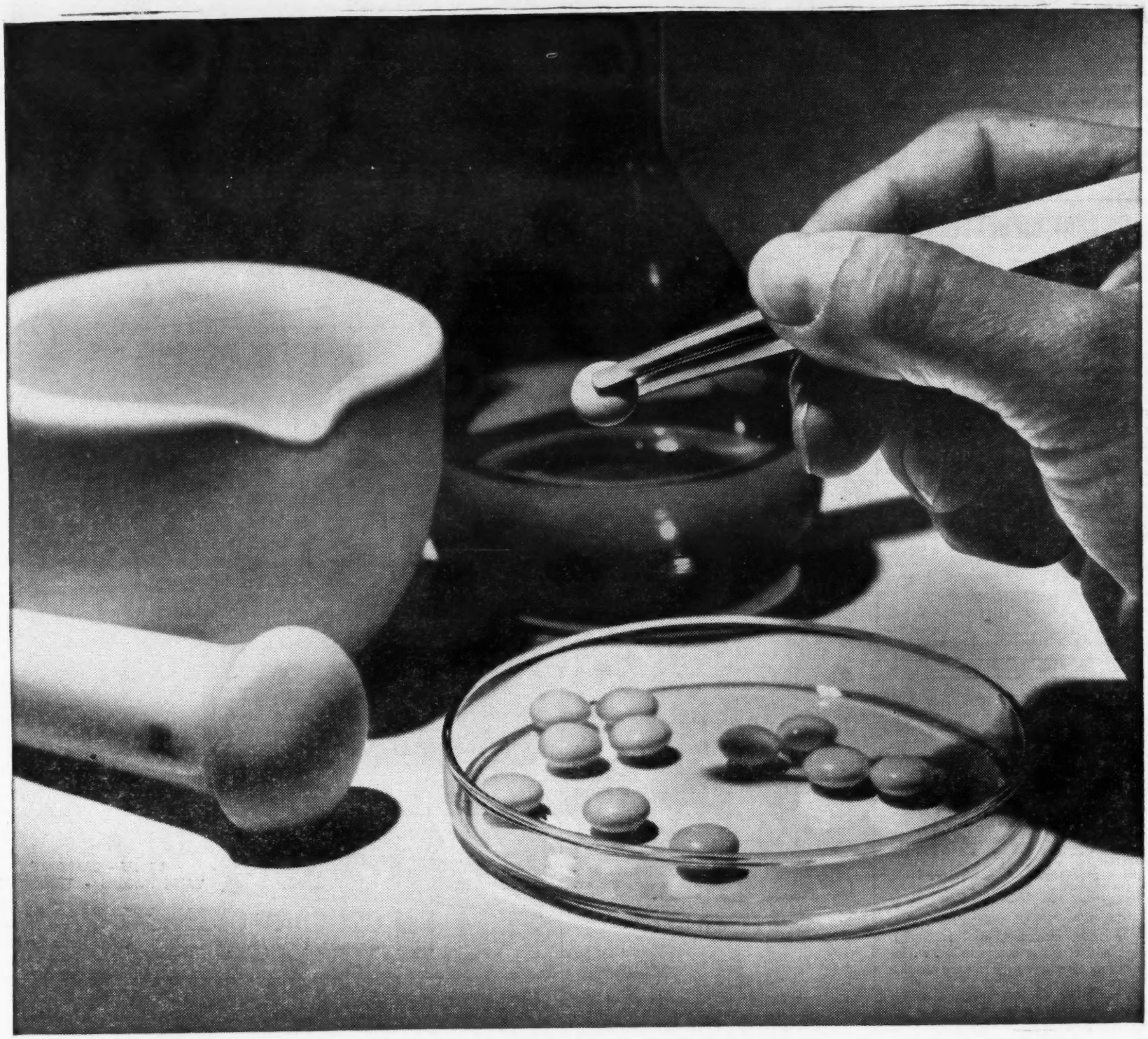

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Drugs, Fine Chemicals

Competition for available hydrocortisone acetate and alcohol business has been growing steadily keener—to some extent due to large volume foreign offerings—with the result that prices are now at all time low levels. Reports of sales made at $1.25 per gram were received here last week but this low price apparently was indicative only of isolated large lot trading and not of the overall market situation. Other business was being transacted up to $1.75 a gram, it was said.

Excepting hydrocortisone, there was no other price news last week. In fact, trade sources felt that further activity will necessarily be kept in check by mounting costs of raw materials and what looks like the beginning of another round of wage boosts starting in Pittsburgh.

Drug and fine chemicals producers usually do a good business regardless of the season or, for that matter, recessions—witness sales and earnings reports for '58. Last week, at least some of the trade reported "better than good" business. This was especially true of producers of chemicals that have industrial applications, in addition to pharmaceutical and food uses. Such materials as citric acid and the mercury salts were said to be in excellent demand from industry—the cream on the coffee, as it were.

Demand for vitamins is said to be running into terrific volume, particularly from food users, but price weakness is also reported. To quote a trade member, the vitamin situation is a paradox.

Not going along with the general trend, vitamin E prices are quite firm. Trade reports indicate that the vitamin is coming under increased scruting in the labs and that developments end-use wise will undoubtedly be forthcoming before much time passes.

Among the more prominent new things, are a class of fine chemicals known as bacteriostats or germ-inhibiting agents. As a group they have already displayed a highly enviable growth rate and, according to trade sources, the promise of future market expansion is equally as inviting.

Bacteriostats—As a class of fine chemicals, the bacteriostats or germ inhibiting agents are becoming more and more prominent. Thus far, the growth rate for the group as a whole has been enviable, and according to trade sources, the promise of future market expansion is equally as inviting and clearly evidenced by the rapidity with which new products have been debuted in this market during the past few years.

Probably the first of the bacteriostats to come into wide usage was TMTD (tetramethylthiuram disulfide), the active ingredient in Lifebouy soap. Then came what is believed to be still the most widely used of the bacteriostats, hexachlorophene.

As practically all the world knows by now, hexachlorophene is the all important, much promoted ingredient in Dial soap. What people are coming to know is that it is also incorporated in a variety of other things such as lotions, shampoos, skin creams, and powdered soaps.

Sources say that Dial soap and the extensive advertising campaign that launched it not only made the word "hexachlorophene" highly salable but gave the real push to the use of bacteriostats in general.

Among the products that followed hexachlorophene, were TTC (trichlorocarbanalate) and Bithionol USP (2,2' thiobis(4,6, dichlorophenol)). Both materials it's said, are steadily growing in importance with usage extending to a diverse line of end-products.

Promise of further growth of the bacteriostat market is tied to several factors, all of which have been touched upon lightly above. The first of these is that the country has been on a health kick for the past several years, which shows no signs of diminishing, and people are becoming more and more knowledgeable about new medical developments. This, of course, has led to a very germ-conscious public.

Advertising, of course, is the second most important factor. Products that have been promoted on a "this is better for your health" type theme generally have been successful. This trend in advertising will undoubtedly continue.

Also, of course, there are the traditional factors behind the expansion of any market—population growth and the like.

b-Carotene—Production economies resulting from increased requirements as well as the desire to spur further usage prompted a substantial price reduction for b-carotene early last month. New schedules, lower by approximately 17 percent, list the pure cystalline material at $240 per kilo.

b-Carotene is used by both butter and margarine producers as a coloring agent. Competitive colors, coal yellows 3 and 4, were recently refused further certification by FDA, and this "happy coincidence" should lead to an expanded market for carotene, it's said.

Gelatin—March production of gelatin, according to a Census bureau report, amounted to 4,768,000 pounds, lower than the preceding month's figure (5,237,000), but slightly above April '58 output of 4,547,000 pounds.

Shipments during April, at 4,904,000 pounds, were also below the level for March (5,432,000), as well as the same month a year earlier (4,993,999), but exceeding output, permitted a decline in end-of-month stock of approximately 136,000 pounds. The figures: April 30, inventory, 13,040,000 pounds; March, 13,176,000; April '58, 14,437,000.

Production of pharmaceutical grade gelatin amounted to 375,000 pounds, up from 317,000 in the preceding month, and 257,000 in April '58. Shipments, however, showed the opposite trend, dropping to 255,000 pounds from 340,000 in March. End-of month stocks consequently rose to 892,000 from 772,000. This figure nonetheless represented a substantial improvement over the outsize inventory position of April '58—1,136,000 pounds.

The recently revised price schedule for gelatin is now set-up as follows: 75 AOAC test, 53c. a pound; 150 AOAC test, 62c.; 200 AOAC test, 68c.; 225 AOAC test, 70c.; and 275 AOAC test, 78c. per pound.

Demand from pharmaceutical users is said to be steady and in normal volume.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 6, 1958
60.51	60.51	60.85	63.13

For Current Prices see page **9**

Drugs and Fine Chemicals Output: March

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		March	*February*
Acetylsalicylic acid	lbs.	1,512,444	1,387,216
Ascorbic acid and salts	lbs.	493,197	361,680
Dihydrostreptomycin	gms.	18,423,195	20,583,458
Niacin and amide	lbs.	362,046	279,889
Penicillin salts	million units	37,797,117	35,040,857
Pyridoxine	lbs.	*	*
Streptomycin	gms.	8,722,876	12,936,470
Sulfa drugs	lbs.	438,559	**351,615
Tetracycline	gms.	11,850,690	*
Thiamine and derivatives	lbs.	12,015	14,374

* Data not reported.
** Revised.

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COLOMBIA:	Productos Roche S.A., Bogotá
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ENGLAND:	Roche Products Ltd., London, W.1.
FRANCE:	F. Hoffmann-La Roche & Cie., Paris IVe
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JAPAN:	Nippon Roche K.K., Tokyo
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Drugs, Fine Chemicals

Interest from the candy makers is beginning to get slow, however.

Vitamins—The vitamin situation is and has been for six months or more, a paradox. On the one hand, demand has been very strong, particularly from manufacturers of prepared foods who reportedly have responded to the several recent price reductions with increased orders.

On the other hand, continual price weakness is reported. In fact, one of the weakest markets price-wise is one of the strongest demand-wise — ascorbic acid which obviously is growing steadily in usage. No better witness for that fact is the variety of products — canned fruit juices, cough drops and the like—that carry the label "vitamin C" added.

Still weak, it's also said, is the B_6 schedule and to a lesser extent B_1 and B_2 listings.

No clear cut reasons for the steadily weaker price tone are apparent. Among the several factors thought to be involved, however, are imports (vitamin C mostly), the dealings of some dealers, and pressure from buyers.

Vitamin E is coming in for increased interest. Trade reports indicate that much research is being done and new developments are expected. Prices are described as firm.

Botanicals

Agar Agar—Competitive bids are now being solicited by General Services Administration for 42 short tons of agar which are surplus to the government's needs. Bids, to be opened on June 15, may be made on lot or case units.

What effect this additional material will have on prices, once it's offered to the consuming trade, is the problem currently besetting some dealers here. Opinions naturally vary.

One dealer feels that the extra material will have little if any effect on prices. Though 42 short tons is a goodly percentage of the US market—estimated to be in the vicinity of 224 to 280 short tons annually—he thinks that demand here is great enough to absorb it readily. To put it more succintly, the market reportedly is hungry.

It's also said that some traders are finding it a bit difficult to fill existing contracts and may be counting on using material purchased from GSA to meet these commitments. Back of limited stocks here are tight supplies at source, both in Europe and Japan.

Other trade sources took somewhat the opposite view. They, for instance, considered the quantity of the material being offered a potentially depressing influence. Admittedly, the quality of the stockpiled agar will also have a lot to do with the price at which it will be offered and the market it will find.

The current spot quote on agar Kobe No. 1 strip is $2.10 a pound. As recently as last March it was selling at $1.80 a pound.

Arabic Gum—Dealers' reports last week indicated that this market is growing increasingly stronger price-wise. The fact of good demand was said to be incidental. Rather it was the likelihood of a very short crop in the Sudan this year that was propelling prices skyward.

Karaya—Like arabic gum, karaya gum is coming in for increased interest. Prices also continue to strengthen on spot.

Very little karaya is currently being bought for import as dealers here are holding out for more favorable prices at source. Domestic stocks reportedly are adequate for the time being.

Tragacanth Gum—Demands are found normal, dealers' stocks adequate. No. 1 ribbons are presently listed at $3.60 to $3.75 a pound; No. 2 at $3.40-$3.60; and No. 3 at $3.15 to $3.25. The USP powder is $1.05 to $1.15 a pound.

Strong, Cobb and Arner Merger Effective Today

Merger of Strong, Cobb & Co., Cleveland, Ohio, and Arner Company, Buffalo, N. Y., has been approved at meetings of the shareholders of both companies. The merger will go into effect today (June 8.)

Earlier, directors of the two companies had agreed to terms of the merger (OPD, 5-18-59). The newly-formed company will be known as Strong, Cobb, Arner, Inc.

Dr. Niels C. Klendshoj, president of Arner since 1951, will serve as chairman of the board. John N. Eustic, president of Strong, Cobb since 1955, will be president of the new corporation.

Vitro Gets Vice-Pres.

Woodman Perine, president of Vitro Engineering Company, has been named vice-president of Vitro Corporation of America, New York.

Elastomers in 1958

—Continued from page 7

million pounds in 1958, compared with 1,851 million pounds in 1957.

Sales amounted to 1,544 million pounds, valued at $362 million in 1958, compared with 1,620 million pounds, valued at $390 million in 1957.

Production of acyclic elastomers, including neoprene, butyl, N-type, silicone, and other types, amounted to 449 million pounds in 1958, compared with 503 million pounds in 1957.

Sales of these products amounted to 454 million pounds, valued at $182 million in 1958, compared with 479 million pounds, valued at $187 million in 1957.

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Armour Has an Enzyme For Cataract Operations

An enzyme said to make operations for cataract of the eye easier, quicker and less trying to the patient has been made by Armour Pharmaceutical Company, Chicago.

After months of tests and hundreds of operations, made in cooperation with scientific bodies, the preparation, "Alpha Chymar," has been released to the medical profession, Armour says.

"Alpha Chymar" (alpha chymotrypisn) is a pure crystalline substance obtained from the bovine pancreas. It is a proteolitic enzyme, meaning that its function in the body is to digest protein.

When dropped into the eye of a cataract patient, the enzyme softens and weakens the bands called zonules which h[illegible] the lens of the eye in place. The surgeon can then lift out the clouded [illegible] without danger of tearing and damaging the eye.

Some eye surgeons using "Alpha Chymar" report that confinement time may be reduced in half. Confinement time varies according to the individual patient, but previous to the use of "Alpha Chymar" it was two to four weeks.

Imports at US Ports

—*Continued from page 45*

PETROLEUM, CRUDE—29,811 tons, Wilshire Oil Co, Umm Said
232,960 bbls, Standard Oil Co, Dumai

QUEBRACHO EXTRACT—643 bgs, National City Bank, Beunos Aires
500 bgs, International Products Corp, Buenos Aires

TAPIOCA FLOUR—560 bgs, Stein Hall & Co, Kohsichang
1,340 bgs, Morningstar Paisley Inc, Kohsichang

TITANIUM PIGMENTS—200 bgs, Loretz & Co, Kobe

VITAMIN-C—10 dms, Yokohama

ZINC OXIDE—800 bgs, London

Philadelphia

ARSENIC TRIOXIDE—360 dms, American Firstoline Corp, Sete

ASBESTOS FIBER—2,000 bgs, Chas Kurz & Co, Lourenco Marques

CALCIUM CARBONATE—1,600 bgs, Pluess Staufer, Antwerp

CALCIUM PHOSPHATE, DIBASIC—1,102 bgs, Wessel Duval & Co, Antwerp

CASEIN—500 bgs, National Casein Sales, Buenos Aires
400 bgs, Paul A Dunkel, Buenos Aires
120 bgs, Melbourne

FUEL OIL—103,976 bbls, Socony Mobil Oil Co, Punta Cardon
130,143 bbls, Shell Oil Co, Tampico

GYPSUM, CRUDE—7,092 tons, U S Gypsum Co, Hantsport

MAGNESITE—2,000 bgs, Lintex Co, Sibenik

MOLASSES—1,897,489 gals, S Western Sugar & Molasses Co, Madras
111,542 gals, Tanamo
798,827 gals, Puerto Padre
467,227 gals, Havana

PEATMOSS—1,000 bls, E Dunwoody, Bremen
1,250 bls, New Amsterdam Import Co, Bremen
1,000 bls, E J Lang, Bremen
2,000 bls, Premier Peatmoss Corp, Bremen
1,320 bls, E Hirsch, Bremen

PEPPER, WHITE—70 bgs, East India Trading Co, Singapore

PETROLEUM, CRUDE—137,154 bbls, Gulf Oil Corp, Bachaquero
268,024 bbls, Gulf Oil Corp, Bandar Mashur
657,032 bbls, Gulf Oil Corp, Mena Al Ahmadi
136,211 bbls, Atlantic Refining Co, Pamatacual
117,395 bbls, Atlantic Refining Co, La Salina
99,845 bbls, Texas Oil Co, Puerto La Cruz
198,936 bbls, Socony Mobil Oil Co, Covenas
107,728 bbls, Socony Mobil Oil Co, Amuay Bay
114,091 bbls, Socony Mobil Oil Co, San Lorenzo

STEARYL ALCOHOL—250 cs, A & S Corp, Kobe

VANILLA BEANS—29 cs, J A McCarthy, Marseille
54 cs, Camax Co, Vera Cruz

ZIRCON SAND—998 bgs, International Minerals, Brisbane
948 bgs, Frank Samuel & Co, Brisbane
1,005 bgs, Import Export Industries, Sydney

San Francisco

BONE—540 tons, Stauffer Chemical Co, Buenos Aires

CASEIN—500 bgs, Eugenio Lang, Buenos Aires
100 bgs, Borden Chemical Co, Buenos Aires

CETYL STEARYL ALCOHOL—441 bgs, American Alcolac Corp, Yokohama

COCONUT OIL—356 tons, Pacific Vegetable Oil Corp, Iloilo

COPRA—1,320 tons, Cargill Inc, Cebu
1,800 tons, American Trust Co, Cebu
750 tons, Cargill Inc, Iloilo
250 tons, Cebu

GYPSUM, CRUDE—6,000 tons, Kaiser Gypsum Co, San Marcos

LIVERMEAL—500 bgs, Tupman Thurlow, Rio Grande
441 bgs, Tupman Thurlow, Sydney

PEPPER, BLACK—714 bgs, California Commodities Corp, Singapore

POLYVINYL ALCOHOL—920 bgs, Marubeni Iida Co, Kobe

Current Market Quotations

—*Continued from page 30*

Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd, E	100 lbs.	8.75	—
bgs., l.c.l., dlvd. E	100 lbs.	9.75	—
USP, gran., dms.	lb.	.26	—
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Zinc undecylenate, dms.	lb.	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls, c.l., works	100 lbs.	10.85	—
bbls., l.c.l., works	100 lbs.	11.35	—
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	—
normal, 250-lb. dms., frt. alld	lb.	.52	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½	—
bgs., 5 tons to c.l., works	lb.	.03¾	—
bgs., 1 ton to 9,999-lb. lots, works.	lb.	.04	—
bgs., smaller lots, works	lb.	.06½	—
Zircon (G), milled, bgs., c.l., works.	lb.	.04½	—
bgs., 5 tons to c.l., works	lb.	.04¾	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	—
bgs., 500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln., 13% ZrO, dms., c.l., 30,000 lbs. min., works	lb.	.23	—
Zirconium hydride, powd., electronic grade dms., works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	—
Zirconium oxide, electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.45½	—
bgs., smaller lots, works	lb.	.48	—
milled, bgs., c.l., works	lb.	.59	—
bgs., 5-ton lots, works	lb.	.59½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.60	—
bgs., 500 to 1,999-lb. lots., works	lb.	.60½	—
bgs., smaller lots, works	lb.	.63	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychioride, cryst., ctns., 5-ton lots, works	lb.	.35½	—

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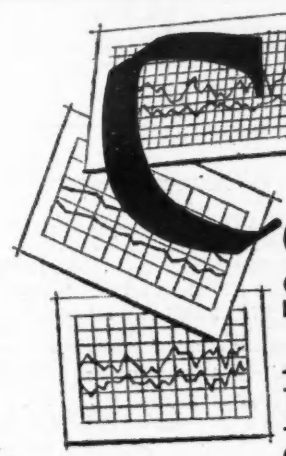

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Coatings Materials

Lead oxide was strong, and so was casein, but prices of neither changed. Nor was there any change in the snug supply position of phthalic anhydride and the alkyds and phthalates that derive from it. A relaxation of this situation is not likely to occur until the steel industry is back to normal, a trade source said. Meanwhile, stocks are adequate to meet needs of contract customers, but spot material has to be shopped for apparently. Demand for the items, incidentally, is as brisk as though this were the middle of the Spring season.

Casein's steadiness last week failed to conceal an upward drift. Demand was surprisingly good, considering how it had lagged a month ago, and stocks in the Argentine were none too plentiful. And finally, Western Europe has had to buy from both directions, that is from Poland and Argentina, because of its own scant output during the last flush season.

According to latest reports from the Census Bureau, the fortunes of antimony oxide continued to wane through 1958 but improved enough during the first quarter of this year to indicate that a comeback was in the books. In its pigment outlet, however, it continued downward, overwhelmed, doubtless, by the awesome presence of titanium dioxide. Overall output, on an antimony-content basis, totaled just 1,065 short tons in 1958, down sharply from the previous year's 1,571, the latter total itself not stacking up too well against 1955's record 1,834 tons. The '58 performance left the material in the position it had held through the 1949-53 era, an era regarded as neanderthal by the fast-growing newcomers on the chemical scene. First-quarter figures for antimony oxide appear below.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 6, 1958
103.04	103.04	103.05	101.44

For Current Prices see page 9

Prime Pigments

Antimony Oxide — Domestic smelter output of antimony oxide reached a high level in the first quarter, totaling on an antimony-content basis, 1,155 short tons as compared with 3,825 tons in all of 1958. An increase of imports was also reported, but not as great as that of production. The first quarter saw 354 tons imported as compared with 1,065 in all of 1958. Belgium-Luxembourg shipped 42 tons here, West Germany 60, the Netherlands 12 and the United Kingdom 240.

The oft-noted downtrend of pigment usage continued, 193 tons of antimony going into this outlet as compared with 1,047 in all of 1958. This actually was not as steep as the downturns of previous quarters, indicating that the outlet may be levelling off.

Carbon Black—Rubber outlets are active under needs of the automotive industry, with supply sufficient to fill the demand. Nothing important has happened to prices in over a year, but a short time back minor adjustments were made affecting mainly small quantity differentials.

Output of carbon black totaled 164,389,000 pounds in April as compared with 165,410,000 a month earlier, while shipments slackened to 155,888,000 pounds as against a previous 181,145,000. The cumulative production total for the first four months of this year was tallied at 624,477,000 pounds, up sharply from the 540,926,000 produced in the corresponding period of 1958. Shipments moved even higher, totaling 669,524,000 as against 527,350,000. Details from the Bureau of Mines' latest report will appear in this space next week.

Chrome Colors—The automotive industry is setting the pace through most of the economy, and the effect has been felt in this market where demand continues as a smart clip. Output in March was stepped up to 3,093 short tons(all chrome colors), from 2,673 the month before and only 2,442 a year ago. Details will follow next week.

Lead Oxide—Prices are steady with a strong undertone, reflecting the strong position of lead. Much has been said about good demand for white lead in the retail paint field but a more interesting trend now in evidence is the brisk rise in industrial coatings with a corresponding jump in sales of red lead. Supply is adequate to fill all needs, the trade reports.

Synthetic Resins

The following figures show production in pounds for March and list February's figures for comparison, as reported by the Tariff Commission:

Production

	*February	March
Phenolic and other tar acid resins:		
Molding resins	16,696,246	19,685,832
Laminating resins	10,496,524	11,091,078
Protective coating resins, modified, unmodified, except by rosin	2,252,079	2,712,069
Urea and melamine resins:		
Protective coating resins, straight modified	2,607,037	3,104,637
Styrene resins:		
Protective coating resins, straight modified	6,899,412	6,648,802
Vinyl resins:		
Total all types	82,936,820	91,662,415
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	20,201,818	24,149,899
Modified with tar acids, rosin and or other material except styrene	6,050,190	6,149,604
Polybasic acid types except phthalic:		
Unmodified	524,156	616,797
Modified with tar acids, rosin and or other materials except styrene	937,707	1,027,465
Rosin modifications for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	902,990	1,087,759
Esterified with other alcohols, pentaerythritol, glycols, etc.	908,192	1,007,994
Modifications with phenolic and other tar acid resins	2,243,159	2,239,614
Modifications with maleic and fumaric acids	2,214,620	2,237,554
All other modifications.	3,925,193	4,030,618
Coumarone—indene and petroleum polymer resins	21,403,604	23,059,062
Miscellaneous synthetic plastics and resin:		
Materials, including silicone resins	17,947,719	21,375,617

* Revised.

Natural Resins

Gum — The end of the season is approaching, but, meanwhile, an active demand persists. Congo No. 3 is receiving particularly good call at 16½c. to 19c. per pound, the price established with the 3½c. per pound advance of a month ago. Congos No. 1 and 2 are available at 25c. to 26c. and 22c. to 24c. per pound, respectively.

Shellac — As noted frequently in this space, prices have held indestructably steady since the imposition of floor levels at Calcutta about a year ago. Some seasonal demand is still present, dealers report.

Orange grades were moved at 36c. to 39c. for lemon No. 1, 35c. to 37c. for No. 2 and 32c. to 34c. for superfine. Bleached sold at 46c. for bonedry and 56c. for fully refined in bags, 1,500-lb. lots.

Fillers and Inerts

Asbestos—The overall business recovery in the first quarter brought an 11 percent rise in asbestos shipments over the comparable period of last year. For the second quarter, it has been estimated that shipments will exceed those of 1958 by roughly 15 percent, but fall five percent short of the record level set in 1957.

All grades of crude are in ample supply, and price levels appear quite steady.

As to individual markets, sharp competition is noted in some where business is otherwise good, while in others business is rather slow. Still others, namely cement products and shingling, show a happy coincidence of high sales volume and balanced supply. The competitive situation of textiles is said to be acute and likely to remain so for the balance of the year except for a temporary let-up this Summer. Orders for paper and millboard apparently have slowed down, with competitive pricing for what business remains. While low pressure insulation also has slowed, an upturn is expected soon and prices meanwhile continue

Coatings Materials

steady. Business in AC pipes is rated seasonally fair with a promising outlook for the balance of the year.

Miscellaneous

Casein — Though the market was still strong, prices held about unchanged. Spot and nearby Argentine was offered at a range of 20½c. to 21c. per pound, minimum one carlot, while August shipment was available at 19¾c. Polish stocks continued adequate to fill all needs at prices similar to Argentine. Australian casein, a material of slightly higher quality according to trade sources, ranged 21½c. to 22c. per pound.

New Zealand material has been long unchanged at 24c. per pound, and along with all varieties of imported casein has been meeting a fair level of demand. Domestic grades are moving in normal small volume to established outlets.

Glue—The following figures compiled by the Bureau of Census indicate production, shipments and stocks of bone and hide glue in thousands of pounds during April with March's figures shown for comparison:

Production

	Apr.	Mar.
Hide glue, total	5,455	4,955
Low grade	1,937	1,921
Medium grade	1,440	1,682
High grade	1,441	752
Extra high grade	637	600
Bone glue, total	4,343	3,644
Green	3,877	3,055
Extracted	466	589
Glue, total	9,798	8,599

Shipments

Hide glue, total	5,780	5,022
Low grade	2,087	2,211
Medium grade	2,209	1,468
High grade	1,005	838
Extra high grade	479	505
Bone glue, total	4,927	4,622
Green	3,834	3,341
Extracted	1,093	1,281
Glue, total	10,707	9,644

Stocks

Hide glue, total	23,171	23,496
Low grade	7,891	8,041
Medium grade	7,717	8,486
High grade	5,074	4,638
Extra high grade	2,489	2,331
Bone glue, total	10,545	11,129
Green	8,201	8,158
Extracted	2,344	2,971
Glue, total	33,716	34,625

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. May 29	Mon. June 1	Tues. June 2	Wed. June 3	Thurs. June 4
Drums—					
M	...	...	...	...	$8.31
N	...	...	...	$8.56	...
WG	$8.80	$8.91	$8.77	8.83‡	...
WW	8.83‡	...	8.91‡	9.03	...
Bags—					
K	...	...	8.40[1]	...	...
N	...	...	8.45‡	...	...
WG	...	...	8.70‡	...	8.61
WW	...	...	8.81‡	...	...

Tankcars (for week ended June 4)—
M or better, $8.10; WG, $8.35, $8.30

Sales, USDA

1,282*	777*	1,323*	883*	902*

New York
(Per 100 lbs., c.l., Friday)
WW, $10.40; WG, $9.85; K-M, $9.75

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.553‡	.53	.534‡	.5375	...
Sales	22,000¶	6,000¶	24,000¶	4,000¶	...

* Drums equivalent. ¶ Gallons. ‡ Average price.
[1] K or better.

Korea Wants to Purchase 23,000 Tons of Fertilizer

With the financial backing of the International Cooperation Administration, the government of Korea is in the market for about 23,230 metric tons of fertilizer. bid is for 12.725 metric tons of nitrogen-Embassy in Washington or from the Korean Consulate Generals in New York and San Francisco. The bids will be opened June 24.

Two types of fertilizer are desired. One bid is for 12.725 metric tons on nitrogenous fertilizer consisting of either urea, ammonium sulfate, ammonium nitrogen, calcium ammonium nitrate or ammonium sulfate-nitrate. The other is for 10,500 metric tons of either superphosphate, triple superphosphate or fused phosphate.

Boeing Jets Dip

—*Continued from page 5*

from vinyl to laminated. Safety paints include an interior flat which cuts down on glare in the pilot's compartment.

For exterior use, electrically "transparent" colors were developed to fit radar requirements. The three new VC-137A jet staff transports recently delivered to the government use the orange-red shade on nose, tail, and outboard wing areas.

The commercial airlines aren't using the orange-red shade to date, but that may well come. Closest to it will be Continental's new jets with golden tails, being readied now by Boeing for service this summer.

Chemists' Club Golf Set

The annual golf tournament of the Chemists' Club of New York will be held tomorrow (June 9) at the Bonnie Briar Country Club at Larchmont, N. Y. Special guests at the meet will be Dow Finsterwald, national Professional Golfers of America champion, and Arnold Palmer, 1958 masters champion.

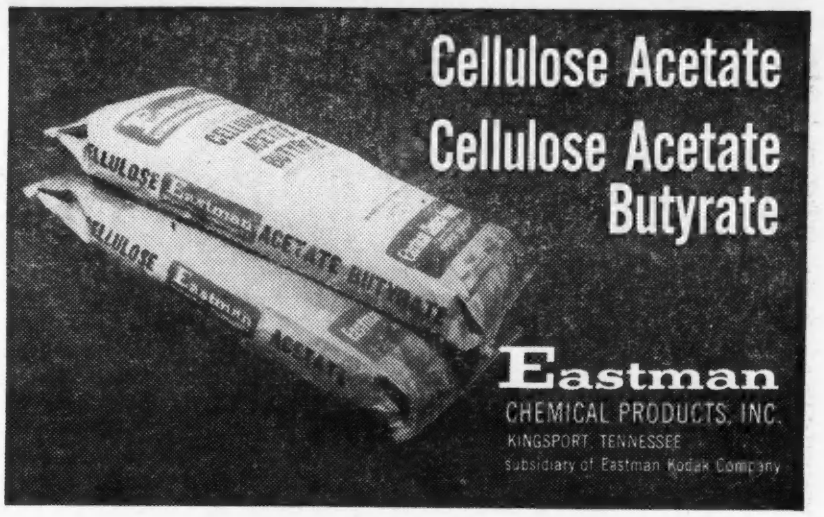
German Chemicals

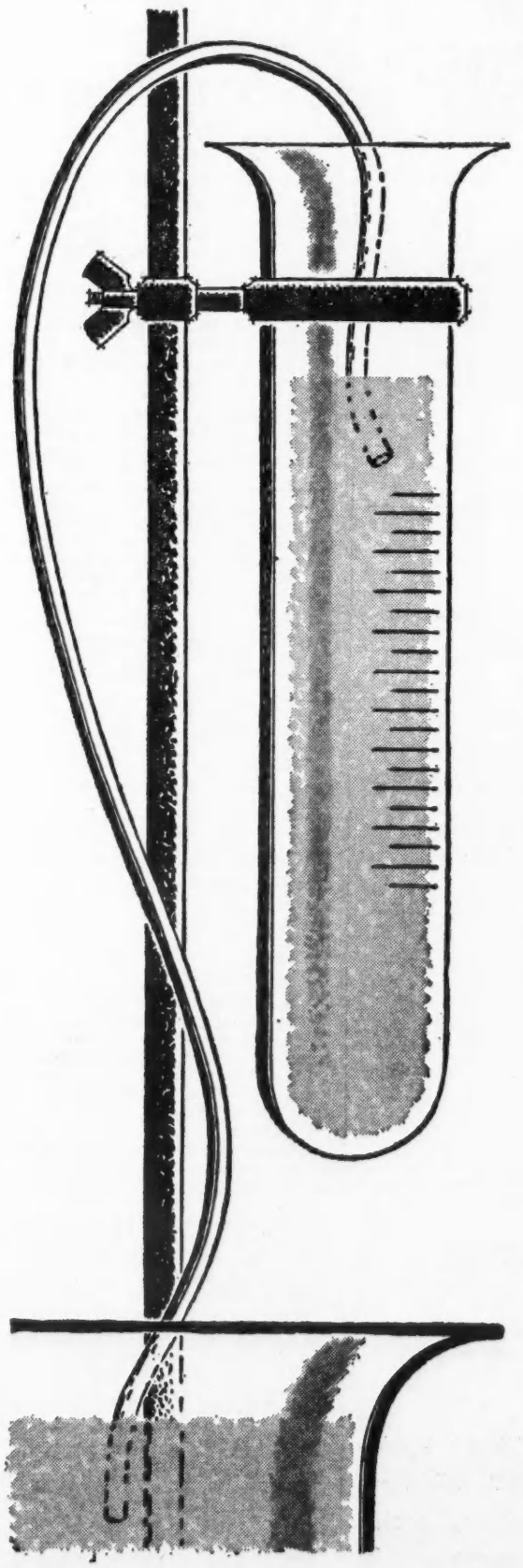
—*Continued from page 4*

tical line advanced by 7 percent. Increased domestic sales were mostly responsible for this increase as exports rose by only 4 percent.

There was a slight loss among soaps and other washing agents. They dropped the gains registered in 1957 as production volume fell off by 2 percent.

The cosmetic and related branches set new records as the value of their production rose by 9 percent. The volume in that field, it was noted, was up 7 percent.





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ES-45 is stable . . . tolerant to hydrocarbons, ketones and ester solvents. Extremely light-hued (Gardner Holt 6-7), it invites application where color is critical. Though used as a plasticizer, its quick solvent release yields films which rapidly set up to a tack-free stage.

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OPD Special Report on DDT

DDT Activities in Mexico Have US Wondering

—*Continued from page 40*

strike with resultant higher benzene prices could force DDT higher, benzene sources indicate that inventories are plentiful, and such a rise is not likely.

Another prop under a possible DDT price boost July 1 would be an increase in chlorine. While there has been some undercover talk in the alkali industry about such a move, an actual decision has not as yet been made—and unless a move is made by June 15, a chlorine price rise is held unlikely for the third quarter.

Thus, barring unusual influences, the price of DDT is expected to hold at 22 cents for some time to come. It may even rise to 23 cents—list price.

On the domestic scene, as well as overseas, the industry does not look for any replacement of DDT on a large scale in the foreseeable future. "There'll never be another DDT," says one source, pointing up the fact that there is little likelihood of a similar impact on pesticides by one single material in the future.

For one thing, DDT was adopted and in widespread use at a time when Food and Drug Administration rules on tolerances were not so stringent as at present.

Now, if a new pesticide is developed, it must go through a much more rigorous and lengthy period of testing by various agencies before it is permitted for use on a widespread basis.

For another, some pesticides have come along in recent years, and have made a sizable dent in the market, but they have never lived up to predictions that they would take away the business from DDT.

Benzene hexachloride is a case in point. This material was expected to replace DDT, but was found to work much better when used in conjunction with the already-established insecticide.

When all is said and done, the most telling points in DDT's favor are its low selling price and its versatility. These factors have been responsible for its staying power in an unpredictable market.

No New Producers Expected

This low price now is considered stable, and consumption is expected to account for 125-130 million pounds annually in the foreseeable future. However, the general belief is that there won't be any new producers.

Furthermore, opinion is that present producers will not expand existing capacity, nor will manufacturers who got out of the business earlier decide to return again.

One reason: Although the present selling price is fairly firm, it's not attractive, and if the price should decline any further, the current roster of manufactuers could dwindle even further.

What about those producers who have withdrawn, but still have equipment—Michigan Chemical, for instance? A DDT plant is an investment that can't be converted easily.

A plant making DDT can't readily be switched over to manufacture another product without considerable expense. The producer has a choice of waiting for the price of the insecticide to rise to a level where it will be profitable to return to production—or scavenging various pieces of equipment from his plant for use in other processes.

At present prices, indications are that dormant production facilities will stay dormant. Further, the large estimated standby capacity now in existence will dwindle sharply during the next year and a half as producers, tired of waiting, dismantle existing units.

This means that the 152-million-pound-a-year capacity now in existence isn't likely to change appreciably during the next few years.

It's not easy to get more than a near-term prediction from a DDT producer as to future developments. After all, it is pointed out, how are you going to predict what will happen to such a zany business?

It's hard to tell, they say, what will happen to an industry that:

- Depends on bugs for its existence.
- Has a continually shrinking capacity and a continually rising production.
- Has an actual capacty of 152 million pounds a year, and an estimated standby potential of another 63 million pounds.
- Rushes 21 million pounds of material into a country whose annual needs are not in excess of 14 million pounds—and this despite the fact that by next July, that country's in-place capacity to produce the same material will be 23 million pounds annually.
- Doesn't know from one year to the next where almost half of its production will be going, due to political considerations.
- Has a list price of 23 cents a pound for its product, and yet books new business at 22 cents a pound despite strong demand.

DDT 'Depth' Study Being Reprinted

OPD's special "in-depth" report on DDT is being reprinted and will be available soon. These nine previous studies are also still in print:

"ULTRAVIOLET ABSORBERS: Lighting the Way to $10 Million Market."
"DOP, DIOP VOLUME RISES: But the Profit Squeeze Continues."
"BUTADIENE CONVALESCES: Industry Recovers from Poor '58."
"STYRENE MONOMER'S STORY: The Industry's Three Big Questions."
"BORAX: A '59 PROFILE—Why US Producers See Double."
"CHELATING AGENTS: A Phenomenon Has Growing Pains."
"POTASH TRADE LOOKS TO 1970: The Trek to Canada and What's Behind It."
"TITANIUM PIGMENT: Why Producers Scoff at Recession."
"BICARB: A 1958 PORTRAIT—An Old-Timer in Today's Market."

Reprints of the ten articles may be obtained at 35 cents a copy (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church street, New York 7.

Cortisone Derivative Seen Effective in Sunburn Cases

Two doctors from the University of Pennsylvania have earned a place in the sun for proving that pills made of a cortisone derivative may be a harmless cure for the misery of ordinary sunburn.

Named triamcinalone, the pill has been available for some time for the treatment of skin diseases and severe burns. It is manufactured under two trade names—"Kenacort" by E. R. Squibb & Sons division of Olin Mathieson Chemical Corporation and "Aristocort" by Lederle Laboratories.

But only recently have large-scale scientific tests proved its effectiveness against sunburn. Taken orally, the drug gave relief within twenty-four hours to fourteen badly burned patients.

The two physicians, Dr. Milton M. Cahn and Dr. Edwin J. Levy, are associates in the dermatology department of the university's School of Medicine.

Pfizer Starts Construction Of Its World Headquarters

Ground has been broken for the world headquarters building for Chas. Pfizer & Co. The thirty-two story structure, scheduled for completion in the spring of 1961, will rise at 235 East 42nd street on the northwest corner of Second avenue, in New York.

The new Pfizer building will house employees of the company's international division and domestic sales and service department now at 800 Second avenue. In addition, sales, accounting and financial functions now located in Brooklyn will move to the 42nd street address when the offices are ready for occupancy.

Essential Oils, Aromatics

A 70 cent decline in the price of independent brand lemon oil from California and a 2 cent decline in the price of clove leaf oil from Madagascar plummeted this column's index number to its lowest figure since October 24, 1958. It currently stands at 145.46. Eight months ago it was 145.41. The lemon price drop, so the dealers report, is not likely to be a permanent decline. It merely represents a few producers' eagerness to dispose of odd lots of oil—some of it as much as a year old. As well as this publication could ascertain, this $2.70 per pound price was in no way indicative of the average prices quoted by the majority of dealers in independent oil from California. The $3.40 per pound price quoted here two weeks ago is a fair estimate of what the customer may expect to pay.

Clove leaf oil's decline also was viewed as a temporary drop based strictly on local conditions, informed sources here said.

For a while after the floods in Madagascar, no leaf oil was shipped from the island. Consequently, the spot prices rose. Now a few orders are being filled and the few fortunate dealers receiving oil, are able to lower their prices ever so slightly to take advantage of their position. Still, no large quantities of clove leaf oil are available now, nor are they expected to be available in the near future.

Clove bud oil, which remained at its previous quotation, is still reported to be about as scarce as hen's teeth.

Eugenol, at a 5-year high, ranges from $2.30 to $2.75 per pound.

Among the seeds and spices, it was said that cassia, cloves, pepper and pimento are all firming up.

Price Trends

Advanced

Dill seed, Indian, dewhiskered, ¼c. per lb.
Fennel seed, Argentinian, ½c. per lb.

Reduced

Canary seed, Turkish, 5c. per lb.
Clove leaf, 2c. per lb.
Lemon, USP, California, 70c. per lb.
Polish, ¼c. per lb.
Sesame seed, San Salvadorian, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	June 6, 1958
145.46	145.55	146.14	145.75

For Current Prices see page 9

Essential Oils

Bergamot — Light supply and routine demand indicate that Italian bergamot will remain, throughout the summer, within the current price range, $12.75 to $13.75 per pound.

Considered the most delicate of all citrus plants, bergamot requires a special climate and soil, according to agricultural information received here. The plantings are easily damaged by frost, so the mild climate of Calabria in southern Italy, suits it very well.

Harvesting is usually started in early December and completed some time in March. Trees that are 12 years old yield upwards of 300 fruits per year.

Citronella—Shippers of Java-type Citronella are not offering to sell, according to a usually well-informed source here. Not because supplies are short, he said, because reports indicate the crops were good this year, but because the shippers anticipate an even firmer market and want ample stocks on hand when dealers are forced to replenish their warehouses.

As far as the growing season is concerned, June is approximately the midpoint between the planting and the harvesting of a new field, agricultural reports indicate. The new field, planted in March, is ready to be harvested in October. A field two years old or older can be cut twice a year—in June and October. The yield of the oil varies according to the season. For example, leaves cut in June yield about 2.4 percent of oil and leaves cut in October yield 1.2 percent of oil.

Historically speaking, one of the earliest references to citronella in Europe was near the end of the 17th century. An army surgeon, Nicolaus Grimm, named the grass Arundo Indica odorata and the oil Oleum siree. The first principal supplying region was Ceylon, which had a virtual monopoly on the oil until 1890 when Java started to produce a better grade of citronella.

Ceylon-type is currently listed at 54c. per pound which is 6c. per pound less than Java-type.

Clove leaf—Now that Madagascar producers are shipping the clove leaf oil that they salvaged after rains flooded the island in late March, the market here is easier than it has been during most of this spring.

Last week's low of $1.38 per pound represents a 2c. per pound decline since the quotation of two weeks ago. There is still no word of the exact damage done to the crops, but an unofficial report received here last week indicated that the floods may have reduced the island's total output 40 to 50 percent.

Cubeb — The previous listing of $12 per pound remained in effect last week for this essential oil, which, according to the experts, is officially a drug. Years ago, both the berries and the oil were used as stimulants to various mucous membranes. But today, they are seldom used medically, except as one of the ingredients in lozenges for the relief of throat ailments. As a quasi-essential oil, cubeb oil is used for the flavoring of bitters and spicy sauces. During World War II when black pepper was unobtainable, cubeb was one of the principal ingredients in an imitation pepper.

Ginger—Distilled ginger in bottles is firm at $10.50 per pound, with some dealers asking as much as $11 per pound.

According to historical data, ginger was known to, and esteemed by, the ancient Greeks and Romans who got the spice from Arabian traders by way of the Red Sea. As early as the ninth century, Germans and the French were using it and in the tenth century, the English began to use it. Its principal use, of course, is as a flavoring agent for food products, but it enjoys a limited use in perfumery. Ginger gives an aroma of individuality to the oriental type of perfume.

Grapefruit—Summertime is citrus time, so the market for grapefruit oil is firming up at the same time the temperature is going up. Last week's prices fell within the range, $2.10 to $2.75 per pound in cans.

Lemon—Possibly last week's most controversial item, independent lemon oil fluctuated between $2.70 and $3.40 per pound. Exchange brand remained at the previous listing, $3.50 per pound. According to various reports, only limited quantities of oil were available at $2.70 per pound. These same reports indicated that dealers who were able to quote the low price were those who had suddenly acquired odd lots which, in some cases, were almost a year old. Quality of some of the $2.70 per pound oil was slightly below regular quality, it was said.

The cheaper grade of lemon oil is used primarily to flavor baked goods and candy. It is not soluble enough to be used in extracts and soft drinks, according to dealers here.

Lime—Unlike the other popular citrus fruit oils, orange and lemon, lime has seen no drastic price decline in recent weeks. In fact, the current quotations have remained unchanged through the first two quarters of 1959. Mexican is between $6.25 and $6.75 per pound; West Indian is between $6.50 and $7.80 per pound, and West Indian expressed is between $7.75 and $8.75 per pound.

An old favorite among the citrus fruit oils, lime first appeared in Arabian literature in the 13th century, according to historical records. Sir Thomas Herbert discovered limes on the islands of Moheli in the Comoro group in 1626.

Octotea cymbarum — Indications are that the market for this oil from Brazil is firming up. The previous listing, 41c. per pound, was the consensus here last week, but several reports hint that a price rise is in the offing.

Orange—The only orange oil that bears watching, say the New York dealers, is the expressed from the West Indies. At the time the domestic producers were making news cutting their prices some three weeks ago, the West Indian oil producers were rather unobtrusively raising their prices. The advance, reported on May 25, was 40c. per pound bringing the per pound price up to $2.75. Last week's low remained at $2.75, but dealers who had been quoting $3 per pound, hiked their listing up past the $3.50 mark.

—*Continued on page 62*

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Oils, Fats and Waxes

An easier tone prevailed in edible oils last week and fractional declines took place in corn, cottonseed, peanut and soybean oils. Trading was limited on a scale downward as consumers continued to operate in a hand to mouth manner. The biggest decline occurred in corn oil ½ cent per pound, while other edible oils were off ⅛ to ⅜ cent. Palm kernel oil was easier with coconut oil and shipments declined ½ cent per pound. Olive oil was stronger, reflecting the sharp advance—$3 to $4 per 100 kilos for Tunisian oil replacements, which placed the cost above Spanish oil. This caused buyers to switch interest to the latter. Oil on the spot also was firmer and advanced 5 to 10 cents per gallon.

A steadier tone developed in tallow and greases as a result of improved demand for export and specialty buyers. Sales took place at unchanged prices with sellers generally asking ⅛ cent higher. Oleo oil and stearine were inactive and fractionally lower. Export demand for lard was fairly active, but the market was irregular and prices closed slightly lower.

Good consuming demand for drying oils continued against contracts, while new business was limited to prompt requirements. No. 1 Brazilian castor oil moved at a reduction of ¼ cent for sizable quantities, with sellers generally holding at former levels. Linseed oil was in good demand for spot delivery and withdrawals against contracts continued to show improvement. Tung oil remained steady, with modrate businss reported for prompt delivery at the recent advance. Oiticica oil remained firm, with trading noted at current quotations. Palm oil was quiet and unchanged on spot and for shipment from primary sources.

Linseed meal was stronger and advanced $2 per ton for nearby delivery, while July shipments were unchanged. Soybean meal demand was spotty. Nearby delivery was 50 cents higher for unrestricted billing and eastern trunk line.

Price Trends

Advanced

Linseed meal, $2 per ton.
Olive oil, spot, 5c. to 10c. per gal.
Soybean meal, 50c. per ton.

Reduced

Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Cottonseed oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Lard, cash, 1/10c. per lb.
Oleo oil, ½c. per lb.
Oleo stearine, ¼c. per lb.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 6, 1958
110.94	110.76	112.66	115.96

For Current Prices see page 9

Vegetable Oils

Castor—Some business in No. 1 Brazilian oil was reported at 17½c. per pound, tankcars, New York, prompt delivery, with sellers generally asking ¼c. more, depending upon quantity. Deliveries against contracts continued to move in good volume. Domestic grades remained steady at unchanged quotations.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	.....
Previous week	.....	.....
Corresponding week, 1958	.....	1,270,000
Total this year	12,411,550	36,110,000
Corresponding period, 1958	8,769,700	37,725,000

Coconut—There was little doing in this market. Offers were still light and held at unchanged levels. Crude was quoted at 20c. per pound, tankcars, f.o.b. Pacific coast, immediate shipment; 19¾, second half June and 19½c., July. At New York the market was merely nominal at 21¾c. to 22c., second half June delivery.

Corn — Crude was weak and declined ½c. per pound. Tankcars were sold at 12¾c. per pound, f.o.b. mills, for prompt delivery. Refined dropped to 16.47c., tankcars, New York basis.

Cottonseed—Futures continued unsettled on the New York Produce Exchange last week. Trading was fairly active and mixed. Market declined fractionally, reflecting easier allied markets. Lack of export activity was also a weakening factor. Liquidation and selling stop loss orders brought July and September deliveries down to new lows for this move. Cash oils were inactive and lower. Refined salad oil declined to 16⅛c. per pound, tankcars, New York basis and resale oil was available below this level.

Crude cottonseed was easy and nominal. Tankcars were quoted at 12⅝c. per pound, f.o.b. mills, in the Valley; 12¾c., southeast and 12⅜c., Texas. New crop crude was offered at 11⅜c. in the Valley and 11c. Texas for October-December delivery with sales reported at ⅛c. less, Texas points.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, June 5, follow:

	Sales	High	Low	Close
		Cents per pound		
July	583	14.26	13.85	13.87S
Sept.	433	13.82	13.35	13.37S
Oct.	27	13.30	13.00	13.00S
Dec.	140	13.28	12.88	13.00
March	24	13.28	12.95	12.85@12.90
May	18	13.25	12.90	12.87@12.90
July (1960)	8	13.10	12.90	12.80@12.90

Total sales and switches, 1,233 contracts.

Linseed—Demand for spot delivery was fairly active and withdrawals against contracts continued to move in increased volume. Market was steady and unchanged. Raw oil was held at 12½c. per pound, tankcars, Minneapolis, for June-August delivery and 12.7c. for September-November. Interest in forward positions lagged.

Olive—sharply higher prices for shipment from Tunisia has switched buying interest to Spanish oil. Tunisian oil was boosted to $64 to $65 per 100 kilos, drums, c and f New York, prompt shipment with offerings limited. This stiffened the tone of Spanish oil market and shipments were unchanged at $57 per 100 kilos, drums, f.o.b. shipping port, but offerings were scarcer. The local market also was firmer. Prices were raised 5c. to 10c. per gallon. Tunisian was quoted at $2.40 to $2.50 per gallon, drums, duty paid, spot, as to quantity and Spanish at $2.50 to $2.60, same basis.

Palm Kernel—Lower coconut oil market coupled with quiet demand weakened replacements. Offers of crude declined ½c. to 18c. per pound, bulk, c.i.f. New York, for late July-early August arrival.

Peanut—This market was easier, with competing oils. Crude was lower and nominal at 13¼c. per pound, f.o.b. mills, prompt shipment. Refined oil was lower and quoted at 16¾c., tankcars, New York basis.

Rapeseed—Buying interest was restricted to actual needs. Tankcars were quoted at 13¼c. per pound, New York, prompt delivery.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, June 5, follow:

	Sales	High	Low	Close
		Cents per pound		
Sept.	2	9.46	9.46	9.30@9.40
March	2	9.21	9.18	9.08@9.12

Total sales, 4 contracts and switches

Soybean — Crude moved irregularly, with sales at slightly lower levels. Tankcars were nominal at the close at 9½c. per pound, Decatur, unrestricted, prompt shipment. Refined salad was easy and quoted at 11.70c. per pound, tankcars, New York, prompt delivery.

Tung—Trading was reported at 23½c. per pound, tankcars, New York, prompt delivery, with sellers naming this price for July and August. Drums were unchanged at 25c. to 25½c., spot, according to quantity. Domestic oil was maintained at 22½c., tankcars, f.o.b. mills.

Miscellaneous

Copra — Market was firmer and advanced to $260 per ton, c.i.f. Pacific coast,

Oils and Fats: April

Following statistics are compiled by the Bureau of Census covering oils and fats production, consumption and factory and warehouse stocks in April, 1959 (in millions of pounds).

Fats and Oils	Crude vegetable, animal fish oils: Production April 1959	Consumed in Refining April 1959	Warehouse Stocks April 1959	Refined vegetable oils[1]: Production April 1959	Warehouse Stocks[2] April 1959
Castor oil [3]	(D)	xxx	24.4	xxx	xxx
Coconut oil [4]	38.4	38.2	37.3	36.0	10.5
Corn oil	25.0	28.1	21.4	26.2	9.8
Cottonseed oil	130.3	113.0	113.8	106.3	296.2
Linseed oil	[5]22.4	16.9	[6]92.4	(NA)	[6]40.3
Palm oil [3]	xxx	xxx	[7]9.8	xxx	xxx
Palm kernel oil	....	4.1	(D)	3.6	(D)
Peanut oil [8]	9.8	8.8	9.6	8.4	8.7
Soybean oil	365.6	335.2	249.2	321.7	263.4
Tall oil	61.4	(D)	132.5	13.4	14.1
Tung oil	4.6	xxx	60.7	xxx	xxx
Vegetable oil foots	20.0	xxx	44.9	xxx	xxx
Edible tallow	26.2	xxx	[7]29.6	xxx	xxx
Inedible tallow and grease (other than wool)	236.5	xxx	[7]286.9	xxx	xxx
Lard [8]	219.0	xxx	[7]146.9	xxx	xxx
Fish oil [8]	2.3	xxx	47.0	xxx	xxx
Marine mammal oil [8]	....	xxx	55.6	xxx	xxx

[r] Revised.
NA—Not available.
D —Withheld to avoid disclosing figures for individual companies.
Note: Consumption of oils in products (shortening, margarine, etc.) will appear shortly in Facts for Industry Series M20K-2, "Fats and Oils, Production and Consumption in Selected Products; Factory and Warehouse Stocks."
[1] Usage of crude oils in refining (alkali or caustic washing) is shown for major vegetable oils. Production of refined oils covers only once-refined oils. Separate data on crude and refined oils are no longer collected for oils other than those specified. Degummed soybean oil is reported as crude oil.
[2] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process," (e.g., refined cottonseed oil includes stocks of stearin, hydrogenated or otherwise).
[3] Stocks of palm, crude coconut, crude castor and sperm oil are on a commercial stocks basis; do not include stockpiles of strategic oils.
[4] Production of raw linseed oil.
[5] Includes raw and boiled linseed oil.
[6] Includes linseed oil other than raw and boiled.
[7] Includes refined.
[8] Data on production and stocks of peanut oil at crude oil mills and production of lard collected by U. S. Department of Agriculture. Data for fish oil producers collected by Fish and Wildlife Service, U. S. Department of Interior.

Oils, Fats and Waxes

afloat while June was unchanged at $257.50 per ton.

Fats and Greases

Greases—Increased buying interest created a steadier tone. Prices were unchanged and well held. Business was reported in yellow grease at 6⅜c. per pound, tankcars, delivered, with low acid material held at ⅛c. higher. Choice white all hog, was quoted at 7⅜c. to 7½c., same basis.

Lard — Export business was reported quite active. Cash lard was irregular and lost early gains closing at 9¼c. per pound, drums, Chicago.

Tallow—Improved demand for moderate lots for export and domestic delivery improved the tone of this market. Bleachable fancy was sold at 6⅞c. and 7c. per pound, tankcars delivered to specialty buyers, while soapers remained on the sidelines. Prime ranged from 6¾c. to 6⅞c. as to seller; special, 6⅝c. to 6¾c. and No. 1, 6⅜c. to 6½c. same basis. Edible tallow was unchanged at 8½c. to 8¾c., same basis. Improved inquiry for guaranteed fancy for export raised prices slightly. Drums were quoted at 8.45c., f.a.s. and 7½c. for bulk.

Cake and Meal

Linseed Meal—Renewed strength developed last week in nearby linseed meal market, reflecting slow production. Prices advanced $2 a ton for immediate delivery. Modest amount of late June and July supplies was booked at $60 a ton. Buyers generally held to nearby coverage and crushers were not anxious sellers because of uncertainties in the toll crush program. Extracted meal, 34 percent, was priced at $62 a ton, bulk, in carlots, f.o.b. Minneapolis, for prompt shipment; $60 for July. Old process expeller, 32 percent, was not quoted.

Soybean Meal—Quiet persisted in this market with no signs of appreciable pickup in volume of trading. Buyers continued to follow hand-to-mouth policy, new business confined to quick shipment orders for nearby needs. Eastern trunk line and west coast markets were comparatively more active than central areas, but even in these areas bookings were modest. In the southeast, premiums for 50 percent meal over 44 percent protein were stronger, reflecting some pickup in broiler and poultry feeding. Spotty distress lots of meal moved at price concessions. Prices were unchanged to 50c. higher on unrestricted billing, up 50c. to $1 on eastern trunk line and west coast. Meal, 44 percent, was held at $53 to $53.50 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Consuming demand for vegetable waxes continued spotty and restricted to immediate delivery. Carnauba grades remained steady and unchanged, except adulterated material which was moved at concessions. No. 3 Ceara, crude, was maintained at 74c. to 76c. per pound, spot and Parnahyba at 2c. more. Replacements from Brazil continued firm and were held at government support prices. No. 1 yellow Ceara was unchanged at $1.10 to $1.12 per pound and Parnahyba at $1.12 to $1.14, spot, according to quantity. Refined beeswax was firm and moved in good volume at unchanged quotations. Crude beeswax replacements were strong and offered sparingly. Candelilla was unchanged and steady. Japan wax was higher for shipment, but spot stocks were unchanged and ranged from 27c. to 29c. per pound, spot, as to seller.

Petroleum Aromatics

—*Continued from page 5*

they consist mainly of ammonia and sulfur.

Dr. McAfee points out that petrochemical output has traveled a long distance in the past thirty-four years, skyrocketing from 150,000 pounds in 1925 to 42 billion pounds last year.

He calls attention to the fact that the petrochemicals industry "is spreading out from its point of origin in the United States to encompass operations throughout the world."

Seconding Dr. McAfee on this is Dr. Giorgio Varvaro president of Compagnia Tecnica Industrie Petroli, S.P.A., of Rome, Italy, who contends that the petroleum industry is facing a period of vigorous expansion in Europe and the Middle East.

According to the CTIP chief, countries in Europe and the Near East, after the recent recession, are on their way to a new peak of aggressive refinery construction.

Now, instead of seeking to produce high quality gasoline, refinery operators are finding gasoline components increasingly valuable as chemical raw materials.

This, says Dr. Varvaro, leads them to build petrochemical plants of their own and to seek out European chemical plants that can use these refinery products.

"This," he observes, "means a tremendous boost in European and Near East construction in the next few years."

Armour Looking Over

—*Continued from page 3*

is not the only one that is intertesting Armour right now. The company is thinking about some other, too, but presently Mississippi seems to be the most promising one.

The company refused to say what other companies it was thinking of.

Currently, Armour produces both commercial and home fertilizers in thirty-two plants. Here is what the company president said recently when he indicated that Armour is actively seeking to expand its interest in the fertilizer business:

"In order to protect the erosion of margins on mixed fertilizer goods arising primarily from the inequitable competition of cooperative mixers, we must acquire our own production of anhydrous ammonia and possibly potash."

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STAINLESS MIXERS

4949 D 2 Baker Perkins Lab. Mixer ¼ gal.; Tilting; Disp. arms; S/S.
5073 Readco Stainless Steel 20 gal. Double Arm (Sigma) Jacketed Mixer with 10 HP XPL Motor.
4689 Baker Perkins S/S Mixer; Jktd. 100 gal. working capacity; with Vacuum cover; 28"x43"x36"; Tilting.
4305 K 3 Baker Perkins Cascade Mixer in Type 316 Stainless; 3 stage Size 17 Class BS Mixers in Tandem.
4702 B1 J. H. Day Cincinnatus S/S Jacketed Mixer; 300 gal. with Double Sigma Z Arms.
5070 F 1-2 Two Cavagnaro Stainless Lined Double Arm Jacketed Vacuum Mixers; 500 gal.; 56"x50"x44", 60 HP Motor.
5070 F 3-4 Two Cavagnaro Stainless Double Arm Jacketed Vacuum Mixers; 150 gal.; 44"x44"x36"; cored arms; 40 HP Motor.
4514 S 2 Stainless Conical Blender 42"x16" body with 16" cones; 22 cu. ft. or 170 gal. 3 HP.
4831 D 17 Readco Jacketed Ribbon Blender; 10 cu. ft. 18"x48"; 5 HP.
NEW FALCON RIBBON BLENDERS in Stainless now in stock; 10, 17, 40 cu. ft. all sizes available on quick delivery.

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3884 B 2 Pfaudler Full Jacketed Agitated 135 gal. Kettle.
4840 B 37 S/S Vertical Kettle 1300 gal. 5'x8'9" with cooling Jkt.
4840 B 38 S/S Vertical Kettle 850 gal. 60"x68".
5027 D 2 1000 gal. Type 316 Stainless Vert. Mixing Kettle; 5'x7' Jktd., Agitd.
5048 D 1 Three Struthers Wells S/S Type 316 Jktd. Mixing Kettles; 6'x10' Agitated.

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Porcelain lined Mills by Abbe Patterson, others in 36"x42", 30"x42", 48"x60" up to 8'x8'.
Patterson JACKETED Ball Mills 54"x42"; good for Vacuum.
1000 gal. Jacketed Buhrstone Lined Pebble Mill; 6'x6'; 25 HP.

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8500 Sturtevant S/S Micronizer 30"x3" with Syntron Vibrator.
4551 S 4 Paul O. Abbe Stainless Ball Mill 9 gal.; 18"x9".
4867 Four Mikro Stainless No. 2 Pulverizers; Rot. Air Lock Feed.
4760 Mikro Atomizers in Stainless Models No. 5 and 6.
4472 G2 Fitzpatrick Comminutator Model K 7 with 20 HP motor.
4904 D 1 Fitzpatrick Comminutator Model D in Stainless Steel.
4834 Fitzpatrick Model C Divelling Mill; 2 Rolls each with 9 Knives.

STAINLESS COLLOID MILLS HOMOGENIZERS — VISCOLIZERS

4510 C1 Marco S/S Homogenizer Model 400; with 10 HP motor.
4827 N3 Cherry Burrell S/S Homogenizer No. 41 Sanitary or Viscolizer; 1500 GPH; 50 HP.
4852 Premier Colloid Mill Type UB with Stainless Rotor-Stator-5 HP.
4687 Charlotte S/S Size 3; 3500 RPM.
1699 F2 U.S. Colloid Mill L2 S/S up to 75 gal. per hour capacity.

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4576-C1 Struthers Wells S/S Heat Exchanger; 774 sq. ft. with 344 (¾") Tubes; 12 Pass.
4576-C2 Same as above 990 sq. ft. with 440 (¾") tubes.
4551-S2 Whitlock Brine Exchanger in Stainless; 18"x12'4"; having 204 (¾") tubes; 440 sq. ft.
4221 P 1 Whitlock Stainless Heat Exchanger: 2 Pass.; 250 sq. ft.
4576 C3 Horizontal Stainless Condenser; 872 sq. ft. 24"x14' having 384 (⅝") tubes.
4344 H 4 Stainless Tubular Condenser; 26"x9'4"; 350 sq. ft.
4000 K1 Vertical Stainless Condenser; 230 (½") S.S. Tubes.
4954 T 3 Patterson-Kelley Stainless Heat Exchanger; 8"x14'; 38 sq. ft.
4726 M 15 Vertical Single Pass S/S Heat Exchanger 13½"x10'4" having 110 (¾") Tubes.
4749 Stainless Sanitary Heat Exchanger; 65 sq. ft. 48 (1") Tubes.

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4870 N2 Sparkler Stainless Filter Model 14/S/4 Jacketed; 16".
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4692 T Oliver Pre Coat Filters; 3'x2' MONEL Drums; ASME.
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2—Baker Perkins 150 and 200 gallon jacketed double arm mixers.
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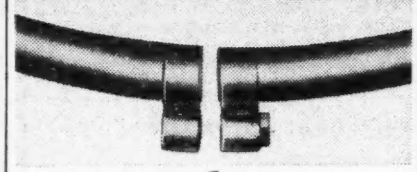

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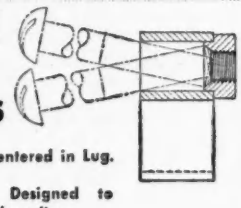

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Mills: Fitzpatrick model D, st., jktd.
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Gen. American 42" x 120" Twin Drum Dryer.
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1—Bird 32" x 50" solid bowl continuous Centrifuge, 316 S.S.
4—Sharples C20 Super-D-Hydrators, 316 S.S.
2—Sharples PN14 Super-D-Canters, 316 S.S.
1—AT&M 26" suspended Centrifuge, perforated basket, 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
3—Sperry 36" rubber covered Plate & Frame Filters, 30 chambers.
4—Sperry 36" cast iron Plate & Frame Filters, 30 chambers.
2—Sperry 42" aluminum Recessed Filters, 36 chambers.
4—Shriver 36" wood Plate & Frame Filters, 44 chambers.
5—Struthers-Wells 8' dia. x 24' high rubber lined Vacuum. Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.
3—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, 7/8" shell welded, 2 tires.
1—Vulcan 8' x 50' Rotary Kiln, 5/8" shell welded, 2 tires.
2—Rennenberg 6' x 60' Rotary Kilns, 5/8" shell riveted.
1—Proctor & Schwartz 8' wide x 60' long Conveyor Dryer, Stainless Steel Belt.

RUBBER LINED TANKS

4—3400 gal. 8' x 8' with Nettco Turbo Agitators, 15 HP motors.
1—4000 gal. 10' x 7'6" with Nettco Turbo Agitator, 10 HP motor.
1—4500 gal. 9' x 9' with Nettco Turbo Agitator, 3 HP motor.
1—5000 gal. 9' x 10' with Nettco Turbo Agitator, 15 HP motor.
5—8500 gal. Vertical Storage, 8'6" x 16' x 8' cone.
1—13,000 gal. Horizontal Storage 8' x 35'.

STEEL TANKS

4—2000 gal. 7' x 7' with Nettco Turbo Agitators, 10 HP motors.
1—3000 gal. 8' x 8' with Patterson Turbo Agitator, 10 HP motor.
1—5200 gal. 10' x 9' with Patterson Turbo Agitator, 10 HP motor.
15—Storage Tanks: 3800; 6000; 9000; 10,000; 15,000; 47,000 gals.

MISCELLANEOUS

11—Steel Buildings 20' to 80' trusses.
2—Shepard Niles 20 ton Overhead Cranes.
7—Dorr Thickeners; 16' dia. with Tanks.
15—Nettco WT37, WT27, Agitator Drives, 10 & 15 HP.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
125—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

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6—B & W 70,000# per hour Boilers, 600 psi.
1—I. R. Two Stage Compressor, type HHE2, 600 HP motor, 3170 cfm, 125 psi.
125—Heat Exchangers up to 4600 sq. ft.
100—Pressure Vessels.
200—Centrifugal Pumps with XP motors.
30—Towers, 2' to 10' dia.
75—Storage Tanks, 1000 to 80,000 barrels.
7—Hortonspheres, 5000 to 10,000 barrels.
Pipe; Valves; Fittings.

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SPECIALS

13—Rotary Dryers: 8' x 87', 7' x 80'. 7' x 55', 6' x 60', 6' x 50', 5'6" x 50', 5'6" x 50', 5' x 30', 4' x 40', 4' x 30', 4' x 20', 34" x 30'.
8—Vulcan 8' x 125' Rotary Kilns.
3—Louisville 8' x 50' S.S. Rotary Dryers.
1—Louisville 4'6" x 40' Aluminum Rotary Steam Tube Dryer.
2—Link Belt 6'4" x 24' S.S. Roto Louvre Dryers.
1—Wyssmont 304 S.S. Turbo Dryer, 6'2" x 10'4" high, 24 shelves.
1—Baker Perkins 5'6" x 6' Rotary Vacuum Dryer or Mixer.
5—Baker Perkins 15 JIM2 100 gal. Mixers, Unused.
5—Raymond 2 Roll Bowl Mills.
1—Penn. Non-Clog Swing Hammermill 5060, Unused.
5—Raymond and Gayco Double Whizzer Air Separators: 18', 14', 8', 30".
2—Buflovak Monel & S.S. Evaporators: 550, 250 sq. ft.
8—Struthers Wells 316 S.S. jacketed, agitated Reactors: 1000, 2000, 3000 gals.
1—Bird 36" x 50", 347 SS Solid Bowl Cont. Centrifuge.
3—Swenson Walker Crystallizers 30' long.
1—Dialyzers 304 S.S., 120 leaves.
1—Buflovak 42" x 120" Double Drum Dryers.
3—Tyler Hummer 4' x 10' type 38 Vibrating Screens.
1—Oliver 100 sq. ft. Vertical Pressure Filter, 304 S.S.
2—5000 gal. Steel jacketed, agitated Kettles.

REACTORS — EVAPS — CONDS — TANKS

1—1500 gal. Pfaudler glass lined jktd. agtd. Reactor.
1—500 gal. Walters 304 S.S. jktd. agtd. Reactor.
1—1400 gal. Blaw-Knox steel jktd. agtd. Reactor.
1—3500 gal. 304 S.S. jktd. agtd. Tank 9' x 7'.
1—7500 gal. 316 S.S. Vert. Storage Tank 7' x 25', 50 psi.
1—20,000 gal. 347 S.S. Vert. Storage Tank, 12' x 23'.
1—750 gal. nickel clad Mixing Tank, 125# internal with nickel coils.
3—Pfaudler 1200 gal. glass lined Tanks, 50 PSI.
1—4000 gal. Haveg Vertical Tank 8' x 12'.
1—12,000 gal. horiz. steel Tank 7'6" x 36', 200 psi.
8—Stainless Heat Exchangers: 1220, 942, 536, 396, 315, 250, 157 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.
1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

1—Bird 18" x 28", 316 S.S. Solid Bowl, Cont.
1—Bird 18" x 28", steel, Solid Bowl, NEW.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Sharples H2 Nozzlejector, 15 HP, 304 S.S.
1—Bird 40" suspended, 347 S.S., perf. basket.
1—Tolhurst 30", 304 S.S. underdriven, perf. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

1—Oliver 5'3" x 8' Steel Rot. Vac. vapor-tite housing.
1—Sparkler 33S28 Filter 150 sq. ft., 304 S.S.
1—Niagara 36H110 horiz. Filter 110 sq. ft. 304 S.S.
1—Sparkler 33-S-17 steel Filter 92 sq. ft.
1—#12 Sweetland, 48 leaves, 3" centers, 640 sq. ft.
2—#10 Sweetland, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

3—Buflovak Vac. shelf, 20—60" x 80" shelves.
1—Devine Vac. Shelf, 19—59" x 78" shelves.
1—Devine Vac. Shelf. 10—40" x 43" shelves.
2—Overton 42" x 120" Atmospheric Double Drum.
2—Devine 5' x 12', 4' x 9' Atmospheric Single Drum.
1—Buflovak 3' x 20' Rotary Vacuum, 316 S.S. Unused.
2—Louisville Rotary Steam Tube, 6' x 25', 6' x 50'.
1—Rotary Kiln, 9' x 130'.
1—Traylor 30" x 18' S.S. Rotary Dryer.

MIXERS

1—Baker Perkins #16TRM 150 gal. jktd. sigma blades, Vacuum, 50 HP.
5—Day "Cincinnatus" double arm, 250 & 100 gal.
3—1500# Powder Mixers, 7-1/2 HP XP motors.
3—Steel jktd. Powder Mixers; 225, 350 cu. ft.

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TYPE 316 STAINLESS STEEL EQUIPMENT

CHEMICAL PLANT — ORANGE, TEXAS

SPECIAL ITEMS

3—Sharples C-20 Super-D-Hydrators, T316 SS, 20 HP.
2—Bird-Young 4' dia. x 3' face rotary vacuum filters, 40 sq. ft., T316 SS.
3—18,000 gal. aluminum cone bottom tanks, 12' dia. x 31' OAH.
4—1200 gal. crystallizers, T316 SS, 5' dia. x 7' high, cone bottom, dished top.
7—560 gal. crystallizers, T316 SS, 3'6" dia. x 7' high, cone bottom, dished top.
1—Alco 35 sq. ft. vertical pressure leaf filter, T316 SS.
3—Worthington 160 ton steam-jet refrigeration units.

TYPE 316 STAINLESS STEEL TANKS

5—1100 gal. 5'6" dia. x 6' high, T316 SS, with paddle agitators, 2 HP.
2—7,500 gal., 10' dia. x 13' high, T316 SS, ¼" shell.
2—6500 gal., 11' dia. x 7' high, T316 SS, 7/16" shell, ½" dished heads.
12—2,300 gal., 7' dia. x 8' high, T316 SS, ¼" shell, coils (some with agitators).
2—2,000 gal., 6'6" O.D. x 8' long, ¼" shell.
1—17,650 gal., 9' dia. x 36' long, T316 SS, ¼" shell, ⅜" dished heads, w/coil.
4—1,000 gal., 5' dia. x 7' high, dished top, 42" deep conical bottom crystallizer.
7—560 gal., 3'6" dia. x 7' high, ¼", dished top, 4' deep conical bottom crystallizer.
55—Tanks and Pots from 10 gal. to 350 gal. sizes, vertical and horizontal.

CONDENSERS — HEAT EXCHANGERS — CALANDRIAS — COOLERS

1—1,450 sq. ft. condenser, stainless steel tubes, tube sheets, heads, and baffles, steel.
1—1,200 sq. ft. condenser, stainless steel tube, steel shell.
14—Condensers, 750 & 800 sq. ft. stainless steel, vertical, T316 SS tubes and heads.
9—Condensers, 356, 400, 410, 550 sq. ft., T316 SS.
6—Calandrias, 140, 145, 150, 157, 262, 277 sq. ft., T316 SS.
11—Exchangers, 64, 70, 75, 80, 100 sq. ft., T316 SS.
12—Exchangers, 20, 30, 47, 50, 52, 54 sq. ft., T316 SS.
15—Exchangers, Cupro-nickel tubes, 50 to 1070 sq. ft.

COLUMNS — STAINLESS STEEL

1—108" dia. Vulcan scrubber, T316 SS, 10 traps on 12" centers, 252 caps per tray.
1—96" dia. Vulcan scrubber, 10 T316 SS trays 12" centers, 276 caps.
2—96" dia. Vulcan columns, 30 trays, T316 SS, 272 caps per tray.
2—60" dia. x 13' high, Vulcan scrubbers, 10 trays, 100 caps tray, 12" centers.
2—48" dia. column, 30 & 25 trays, 66' & 45' high, T316 SS.
3—30" dia. packed columns, 25' high, T316 SS.
4—24" dia. Vulcan bubble cap columns, 12 trays, T316 SS, 18" spacing, vacuum.
2—20" dia. stainless steel columns, 30' & 25' high, T316 SS.

COLUMNS — COPPER

1—72" dia. Vulcan bubble cap copper column, 46'10" high, 40 trays, Vacuum.
2—48" dia. bubble cap copper columns, 31' & 45' high, Vacuum.
2—42" dia. Vulcan stills, 66" high (evaporator bodys).
1—24" dia. column, 25'8½" long, 20—trays, vacuum.

TYPE 316 STAINLESS STEEL KETTLES

4—3,500 gal. kettles, Struthers-Wells, 7' dia. x 12' high, T316 SS, 11/32" shell, dished heads, 11 turns, SS coil, 10# jacket, two-speed agitator, 40/20 HP - 1750/500.
1—2850 gal., 6' dia. x 12' high, T316 SS, horiz, still kettle.

MISCELLANEOUS EQUIPMENT

50—T316 SS Pumps, 1" to 6", 1 HP to 20 HP.
2000—Valves, T316 SS up to 10".
1—Otis Elec. Elevator, automatic, 5000#, 75 FPM.
2—St. St. bucket elevators, 62' and 45' high.
3—Fuller 16" T316 SS rotary feeders.
4—Stainless steel screw conveyors and chutes.
1—2,000 gal. aluminum tank, 6' dia. x 10' high, coils.
1—1,000 gal. copper tank, 7'6" dia. x 3' high, ⅛".
25—Stainless steel steam jet evactors and ejectors.
18—Separators, T316 SS, 22" x 8' overall depth, cone type.
1—Croll-Reynolds #21 jet vacuum air pump, capacity 50# per hour.
1—Pneumatic Conveyor System, approx. 1150 ft. 10" dia. aluminum pipe.
Also Pipes, Steel Pumps, Steel Tanks, Agitators, etc.

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DOUBLE ARM MIXERS

71—Baker-Perkins size #17, 200 gal. working capacity, jacketed, sigma or duplex blades, mechanical, hydraulic, or counterweight tilt mechanisms.
1—Baker-Perkins #15, 100 gal., T304 SS, disp. blades, jktd., 75 HP, vac. cover.
1—J. H. Day 100 gal. sigma-blade, T316 SS, 10 HP.
3—Baker-Perkins sigma-blade, steel: 100, 50 gal.

ROTARY DRYERS — KILNS

2—UNUSED 7'6" dia. x 42' long Kilns, ½" shell, 10' comb. chamber.
2—7'6" dia. x 100' long kiln, ½" shell, firing hood, 30 HP M-R.
1—11' dia. x 155' long Traylor kiln, ¾" welded shell.
4—8'8" x 70' dryers, Hardinge class #XA-18, ½" dbl. shell.
1—7' x 50' dryer, Allis-Chalmers, ½" shell, indirect-direct, 50 HP.
1—6' x 50' Louisville steam-tube dryer, 15 HP M-R.
6—Dryers: 5'6" x 50', 4'9" x 30', 4'6" x 40', 4'6" x 32', 4' x 24', steel.
2—Stainless steel dryers: 4' x 12'6", 3' x 10'6".
1—3' x 15' rotary dryer, Everdur metal construction.
1—Link-Belt Mono-tube dryer, 2' x 10', model #24-10.
2—4' dia. Spray Dryers, Western Precip., T304 SS, pilot size, elec. heating.

FILTERS — CENTRIFUGALS

2—OLIVER 5'3" dia. x 3' f., rot. vac. filters, pressure precoat, T316SS, ASME.
1—OLIVER 5'3" dia. x 8' f. rotary vacuum filter, UNUSED.
1—Niagara #510-28 vert. pressure leaf filter, T316 SS, 500 sq. ft.
1—Niagara #36H-110 horiz. leaf filter, T304 SS, 100 sq. ft.
1—Sparkler #33-S-28 filter, T304 SS, 150 sq. ft.
4—Sharples Super-D-Canters, #PN-14, PY-14, T316 SS.
8—Sharples #16 Super Centrifugals, T304 SS. (sep. & clarif.).
2—Sharples #18-V Super, vapor-tite, tinned-steel, 3 HP.
5—Bird horiz. contin. Centrifugals: 40" x 60", 32" x 50", 18" x 28" S.S.
3—Bird type CH, 24" x 24", Monel slotted screen, continuous.
1—A.T.&M. 48" susp., T304 SS perf. basket, vapor-tite, 20 HP.
6—A.T.&M. 40" susp., T304 SS, solid basket, 40 HP, 1952.
1—Bird 40" susp., steel solid basket, 40 HP, 1800/900 RPM.
2—AT&M 32" susp., T304 SS solid basket, 7½ HP.
1—Fletcher 30" underdriven, T304 SS perf. basket, 5 HP.
1—Tolhurst 26" centerslung, T316 SS perf. basket, 2 HP XP.
1—Tolhurst 26" susp., steel perf. basket, 5 HP, 1954, 1100/550 RPM.
1—A.T.&M. 20" susp., T304 SS solid basket, 7½ HP.

MILLS

1—Hardinge 6'x36" conical ball mill, 75 HP.
1—Hardinge 4'6"x16" conical ball mill, 25 HP.
1—Kennedy-Van Saun 4'x8' rod mill, 50 HP.
5—Allis-Chalmers 5'x22' ball-tube mills, 150 HP.
1—Raymond #15 6-roll, 66" dia. mill, 200 HP.
2—Raymond #5047, 4-roll hi-side roller mills.
1—Babcock & Wilcox pulverizer, type E-32, 75 HP.
10—Batch Pebble mills: 8'x10', 6'x8', 5'x6', 6'x5', etc.
1—Penna. non-clog hammermill, 400 HP, 1952—UNUSED.
8—Hammermills: 60, 50, 25 HP.
1—Kennedy-Van Saun #495 gyratory crusher, 100 HP.
4—Jaw crushers: 36"x15", 20"x6", 18"x9".
3—Ink or paint mill (3-roll): 9"x24", 6"x14".

REACTORS — FERMENTERS — KETTLES

2—3000 gal. Resin Kettles, T304 SS, 7' x 10', 7½ HP XP agit.
1—1400 gal. Reactor, T316 SS, ASME 175#, 20 HP XP agit.
3—750 gal. Fermenters, T304 SS, ASME 30# int. 30# jkt., 10 HP, XP turbine agit.
6—465 gal. reactors, T304 ELC-SS 150# int. 160# jktd.
1—250 gal. reactor, SS, 40# jkt., 10 HP duplex - turbo agit.
2—125 gal. fermenters, T316 SS, ASME 30#, jkt. & int.
1—100 gal. reactor, T304 SS, ASME Vac. int., 75# jkt., UNUSED.
2—Pfaudler 750 gal. G/L reactors, jkt. & agit., impeller agit.
1—Pfaudler 150 gal. G/L reactor, ASME, jkt. & agit.
1—Pfaudler 100 gal. G/L reactor, ASME Vac. int., 75# jkt.
1—Pfaudler 30 gal. G/L reactor, 25# int., 75# jkt. agit.
2—1800 gal. Steel Kettles, 180# jkt., paddle agit., 7" valve.
1—1500 gal. Steel Reactor, ASME 600# int., 150# jkt., 25 HP XP agit.
2—1000 gal. Steel Dissolvers, 20 HP XP agit., jkt.
1—1000 gal. Cast Iron Dopp Kettle, 25 HP agit., jkt., ASME.

PERRY EQUIPMENT CORPORATION

1407 N. SIXTH STREET, PHILADELPHIA 22, PA.
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EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

12—Robinson SS horizontal 255 cu. ft. blenders.

1—Steel & Alloy Tank Co. type 347 SS, 200 gal. jacketed autoclave, 250# internal and jacket pressures.

1—Steel & Alloy Tank Co. 125 gal. type 347 SS, jacketed autoclave, 250# internal and jacket pressures.

4—Steel & Alloy Tank Co. 100 gal. type 347 pressure tanks, 250# pressure.

1—Steel & Alloy Tank Co. 300 gal. type 347 SS pressure tank, 250# pressure.

1—Patterson SS jacketed double arm vacuum sigma blade mixer, 300 gal. complete with motor.

2—Baker Perkins SS double arm sigma blade jacketed mixers, 100 gal.

1—Patterson monel 4 cu. ft. double cone blender.

2—Louisville rotary steam tube dryers, 8' x 45' and 6' x 50'.

1—Traylor kiln 4' x 40'.

1—Louisville rotary dryer, 38" x 40', Type L, indirect.

1—Stokes rotary vacuum dryer, 2' x 6', steel.

10—Day Pony Mixers, 8 gal. and 16 gal.

1—Stokes stainless steel rotary vacuum dryer, 2' x 6'.

3—Stokes rotary vacuum dryers, 3' x 15', steel.

1—Stokes rotary vacuum dryer, 5' x 30'.

3—Robins SS shaker screens 3' x 6'.

2—Selectro SS shaker screens, 2' x 7', 3 deck.

1—Stokes Model DDS2 rotary tablet press.

1—Reitz S.S. Thermascrew, Model TJMK2-12 x 8.

1—Sweetland #3 SS filter, 70 sq. ft.

3—Dorrco rubber covered filters, 6' x 2'.

12—Sweetland #12 filters with SS leaves.

2—Struthers Wells type 316 SS jacketed 3500 gal. reactors, complete with coils, agitators and drives.

8—Alco type 316 SS jacketed reactors, 3000 gal. complete with Turbine agitators and drives, 50 psi jacket.

2—Pfaudler type 316 SS jacketed reactors, 750 gal.

1—Nickel storage tank, 4000 gal. 30 psi.

1—Ames 300 H. P. package steam generator, 150 psi.

1—Feinc SS rotary vacuum string filter, 3' x 3'.

10—Davis Engineering type 316 SS heat exchangers, 87, 104, 121, 139 and 170 sq. ft. (NEW).

1—Merco SS centrifuge, Model B-9.

4—Tolhurst 40" and 48" rubber covered perforated baskets centrifuges complete with motors.

2—Swenson type 316 SS vacuum crystallizers, 3'6" x 12' and 2'6" x 12', complete.

1—Vulcan SS 4' dia. x 28 trays bubble cap column.

2—Badger SS bubble cap columns, 42" x 12 trays, and 36" x 8 trays.

1—Link Belt roto louver dryer, Model 1003-30, complete.

1—Cleaver-Brooks 500 H. P. package steam generator, 150 psi.

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UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

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CENTRIFUGES—Sharples #5 Stainless. Also #6.
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Buffalo Vac. Drum Dryer 24" x 36".
Vac. Shelf & Rotary Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves.
#2 Sweetland 12 Stainless covered leaves.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel, Alum. & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #BB, #3 & #2XX Hammer Mills.
Ball & Jewell #2 Rotary Cutters.
Spr. Wald, Stainless Spike Crusher.
Pebble, Jar & Ball Mills. Lab. to 6' x 8', 3 Roll, 9" x 32", 12" x 30", 16" x 40"
Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack.
Day Imperial 30, 75 & 150 gal.
Change Can Mixers 8, 15, 40, 150 gal.
Day Jumbo 700 gal. horiz. Mixer.
Blystone 3000# horiz. spiral Mixer.
Sturtev. 1 ton Drum Blender 10 HP.
Dry Spiral Mixers 50 to 3000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
Blakeslee 80 qt. vert. mixer.
PUMPS—Stokes, Buffalo etc. Vac. 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson etc.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes RD3 Rotary. Also Single & Rotary ½" to 3".
TANKS—Stainless, Gl. Lined, Steel.
MISC.—Boilers Gas & Oil, Conveyors.

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1—PFAUDLER 750 gal., glass lined jacketed & agitated Reactor, 15 HP motor.

1—PFAUDLER 200 gal., G.L. jktd., agitated.

1—COLUMN nickel clad 6'x27', 200 PSI.

20—COLUMNS 3' to 12'6" dia. bubble cap plates, stainless lined and steel.

1—REACTOR 750 gal. jkt. 300 PSI.

50—PRESSURE VESSELS horizontal & vertical up to 40,000 gal. @ 50 to 350 PSI.

2—FLETCHER 40" Steel Centrifugals, Susp.

1—FLETCHER 30" stainless Centrifugal, Suspended, perforated basket, vaportite.

2—OLIVER 5'3"x3' Precoat Filters 316 S.S.

2—SHARPLES C-20 S.S. Super-D-Hydraters.

2—SHARPLES PN14 Super-D-Canters S.S. 316.

3—ROTO LOUVRE DRYERS Link Belt steel 502-16, 705-24; stainless 604-24.

4—316 STAINLESS STEEL Condensers, 315 sq. ft., 50PSI shell, 175PSI tubes.

100—CUPRO-NICKEL & ADMIRALTY Heat Exchangers; 100 to 5200 sq. ft.

50—STEEL Heat Exchangers: 189, 880; 1042; 2060; 3900; 4420; 7500 sq. ft.

15—ROTARY KILNS, Dryers, Coolers, 11'x155'; 8'x125'; 8'x100'; 8'8"x70'; 8'x50'; 7'x60'; 7'x50'; 6'x50'; 6'x25'; 5'x24'; 2'x30'.

2—STEAM TUBE DRYERS: 6'x50' & 6'x25'.

1—BUFFALO 5'x30' Rotary Vacuum Dryer.

1—50 gal. S.S. Jktd. Agit. Reactor.

1—GAYCO 14' Air Separator.

3—SWENSON-WALKER 24"x20' double spiral. jacketed Crystallizers, 2 HP.

2—STOKES DDS-2 Tablet Presses.

1—NIAGARA Stainless Filter, 54 sq. ft.

3—SWEETLAND #10, #12 Pressure Filters.

4—RAYMOND 5 roll low side mills.

1—RAYMOND 30" dbl. Whizzer Separator.

10—TYLER-HUMMER Screens, 4'x6', 4'x8'.

1—10,000 gal. Propane Tank 200 PSI.

8—EVAPORATORS, 500 to 15,000 sq. ft.

1—B. & J. #1½ Rotary Cutter 30 HP XP.

1—ROBINSON Style B Cutter 30" knives.

8—JEFFREY Hammer Mills, 15"x8"; 20"x12"; 24"x18"; motor driven.

1—DORR Thickener 20'Dx10', Steel Tank.

200—CENTRIFUGAL PUMPS up to 12,000 GPM @ 25' to 900' head, X.P. motor driven.

1500—Recorders, Controllers & Indicators.

HEAT & POWER CO. INC. PROCESS EQPT. DIV.
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310 Thompson Bldg., Tulsa 3, Okla.

CRUSHERS—Jaw—2¼x3 (new), 9x16 Climax, 16x10 Farrel, 24x13 Farrel, Sturtevant 3 HP cone.

MILLS—Hammer—00 Sturtevant 10 HP, AKB Wms. 25 HP, 3W Mikro 30 HP, #2 Gruendler 40 HP, AKBX Wms. 50 HP, 30 NF Wms. 100 HP, #50 Raymond Imp S. S.

SCREENS—12"x72" S/S Ajax, 3x5 single, 3x10 double, 3x10 double (aluminum) Tyler Hummer, 20"x81" triple, 40x84 double Rotex, Jeffrey 30"x72" w/rectifiers.

MIXERS—16 Gal. Pony, 1 c.f., 20 c.f., 30 c.f. cone, 12 c.f., 22 c.f., 26 c.f. Ribbon —52 c.f. Sturtevant Drum—110 gal. double Sigma, Day.

MILLS—Pebble—Lab Jars (new)—30x36, 36 x36, 36x42, 36x48, 72x60, porcelain lined —6'x8' Buhrstone—w/drives.

PACKERS—Valve bag—St.Regis 100LS, 105 FV w/scales—Triangle Auger type—Pneumatic Scale Capper.

FEEDERS — Hardinge — "B" Constant Weight, Draver Rotary, Jeffrey Vibrating 2A.

PUMPS—4" Viking 15HP, 4" Blackmer 25HP (unused), 3" Wilfley Acid, 1" thru 8" Centrifugal, Leiman 105CFM Vacuum

DRYERS — Rotary — 24"x22",33"x18',36"x 24' 44"x25', 4'x40', 42"x14' S/S, 12'x24'x 90" w/12 trucks, steam—68"x25' Louisville.

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EQUIPMENT OFFERED

For Sale: Number of coiled tanks, pumps, boilers, etc. OPD 772.

For Sale: 8,000 gal. stainless vertical Storage Tank; (6) 7,750 gal., (6) 4,650 gal. lastiglas lined Tanks; 72" dia. stainless single effect Evaporator; 1,500 gal. stainless Vacuum Tank with coils; 42" x 120", 32" x 72" 24" x 36" Double Drum Dryers; 750-1,800 gal. stainless Tanks; 40" Tolhurst suspended perforated Centrifuge. Best Equipment Company, 1737 W. Howard St., Chicago 26, Illinois.

For Sale: 2HP, totally enclosed, back geared, Lightnin Mixer; 2—Bantam Micro Pulverizers; Day, 40 gallon Pony Mixer; 2 — Ross 12" x 30" high speed Roller Mills; Swanson automatic friction Capper. Sell Us Your Surplus Equipment, Irving Barcan Company, 249-51 Orient Avenue, Jersey City 5, N. J. DElaware 2-6695.

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Petroleum—35 drums—refined and crude—various manufacturers—amber or brown—3c. per lb. Also 12,000 lbs. Microcrystalline Laminating Wax—Mfr. Dennison Manufacturing—7c. lb. Write OPD 773.

For Sale: Bakelite BR 9432 Resin (Phenol-Formaldehyde) $.33 per lb. (original bbls.). Carbon Tetrachloride redistilled and restabilized, bulk $.07½ per lb. Tricresyl Phosphate, off color, 5 drums, $.26 per lb. DOA Virgin off color, 10 drums, $.35 per lb. Barium Hydrox., N.F., J.T. Baker original, 15 leverpaks, $.06 per lb. DBM Virgin, off color, 30 drums, $.15 per lb. Wash Acetone, 100% Ketone, waterwhite and dry, bulk, $.07 per lb. Lacquer Thinner, off color bulk, $.25 per gal. OPD 777.

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Wanted—Chemist or lab technician for manufacture of organic pigments and dispersions. 5-10 years experience preferred. Salary open. Metropolitan NY area. OPD 774.

POSITIONS WANTED

B.S., 13 years experience in Sales, Market Research and Sales Administration in chemicals for food, drug, cosmetic, detergent, chemical specialties and related industries. Interested responsible position utilizing this background. Employed, available reasonable notice. OPD 775.

POSITIONS WANTED

Young man, Age 30. Ambitious, willing worker. Experienced industrial sales; technical service, market research; administration. Seek challenging position with future. B.S.; MBA credits. Prefer NYC area but will consider other locations. OPD 776.

MCA Slates Two Speakers For Its Annual Convention

Dr. Milton S. Eisenhower, president of Johns Hopkins University, and O. V. Tracy, a vice-president and director of Esso Standard Oil Company, will be principal speakers at the eighty-seventh annual meeting of the Manufacturing Chemists' Association, scheduled for Thursday through Saturday (June 11-13) at the Greenbrier hotel, White Sulphur Springs, W. Va.

Dr. Eisenhower will address MCA's banquet meeting on June 12. Mr. Tracy and John E. Hull, MCA president, will speak at the annual business meeting June 11.

GE Planning

—Continued from page 3

basis at the company's facilities in Pittsfield, Mass.

Production at Pittsfield will continue until the Indiana plant goes on stream. Right now Pittsfield is supplying resin for more than 100 commercial applications and this number is reported growing steadily.

Says Dr. A. E. Schubert, general manager of the chemical materials department: the new "Lexan" plant is another major step in GE's continuing growth in chemicals. Then he adds:

"It is a part of the General Electric Company's policy to expand its chemical activities whenever it has a significant contribution to make to the field.

"With 'Lexan' resin we can offer American industry a versatile thermoplastic material and at the same time place General Electric squarely into this most rapidly growing segment of the plastics industry."

"Lexan" resin offers a combination of properties that reportedly enable it to be used in applications which previously could not make use of plastic materials. Good low-temperature properties make it serviceable for missile and other military applications. Many electrical insulation parts are now being made of "Lexan" because of the material's excellent insulating properties, its stability at temperatures from below minus 100 to plus 250 degrees Fahrenheit, together with the fact that the material is self-extinguishing.

Some Other Applications

Other applications now being produced commercially include such parts as sight glasses, housings, instrument parts, coil forms, electrical connectors, fasteners, cams, film, business machine parts, and military components.

"Lexan" resin was discovered in the General Electric research laboratory in the course of a program of basic polymer research seeking better, high temperature organic materials for insulation and structural applications. The generic term, "polycarbonate" arises from the fact that the organic units in the molecule are joined by a carbonate linkage. "Lexan" resin is said to be the first commercial plastic material built on this structure.

Foreign Business

—Continued from page 5

the fact that when military exports are excluded from the April total, less than $125 million separates the balance between exports and imports.

April's general exports were slightly above the $1,456.3 million reported in March but 4 percent less than the April, 1958, total of $1,529.8 million.

For the first four months period, general exports were valued at $5,604.9 million, about 6 percent less than the $5,932.1 million for the same period last year.

General imports in April were 6 percent under the March record total of $1,220.9 million, but 16 percent higher than the April, 1958, total of $1,056.8 million. The four months total of imports this year was $4,794.1 million, about 15 percent more than the $4,180.8 million recorded for the same period last year.

TiO_2 Dumping

—Continued from page 4

sideration, it was found that the purchase price was less than the home market price. The difference and the quantities involved, however, are considered to be not more than insignificant.

"During the course of the inquiry, the manufacturer changed his prices both to the United States and in the home market. The former was increased and the latter decreased. As a result of the change in pricing, purchase price is now not less than home market price. Assurance has been received from the manufacturer that he does not intend to sell in the future at what might be considered dumping prices."

Essential Oils

—Continued from page 55

Patchouli—The current quotation, $4.80 per pound, has been in effect for over a month, with reports each week for five weeks predicting a price rise. Just what happened to that rise, nobody knows, but now the same people who said patchouli was going up are now telling us it might come down. Shippers, they say, are toying around with the idea of reducing the price so as to find more buyers than they now have.

It is interesting to note that the first contact Europeans had with patchouli (sometimes spelled patchouly) was over a hundred years ago. Dealers in imported fabrics could distinguish between imitation and real Indian cloth by smelling it. The genuine Indian cloth, they thought, had a certain strange odor; the fake didn't.

And it wasn't until the first shipment of dried patchouli leaves came into London, in 1844, that the fabric dealers realized what had been going on. These dried leaves smelled just like genuine Indian fabrics. Obviously, the Indian fabric weavers had learned that it was to their advantage to scent their wares with this strange odor.

Once the secret was out, the French manufacturers began to scent their homespun fabrics with patchouli and helped to break up the Indians' monopoly on exotic fabrics.

Aromatic Chemicals

Benzyl Isoeugenol—No further signs of weakening have been noted since this chemical's decline last month. Its current quotation: $9.50 per pound.

Citral—This lemongrass derivative remained at its previous quotation, $3.15 per pound. It has seen no rise since its 30c. per pound rise last month.

Eugenol—Inside price is still $2.30 per pound with some dealers asking as much as $2.75 per pound. This, however, is unusually high and is expected to level off as the price of the clove oils levels off. According to the 1959 OPD Hi-Lo Chemical Price Issue, the $2.75 price is the highest eugenol has been since 1954 when it was selling for $2.90 per pound.

Styrax Gum—The limited quantites of this gum that came on the market last month at $4.50 per pound are still available at that price.

Seeds and Spices

Cassia—Heavy seasonal demand and light spot and afloat stocks hint that future supplies of cassia will be quite limited. Reliable reports indicate that the market is firming up considerably. They also indicate that cassia from Saigon is in very light supply here. Medium cassia is available but broken is quite hard to come by. Shipments, it was said, are irregular.

Cloves—Demand is quite strong and stocks are dwindling so it is reasonable to assume that a price advance is imminent. No definite word has come from Madagascar where flooding rains in late March destroyed a good portion of the clove crop. Rains were so heavy in certain locales, it has been reported, that the warehouses which housed the harvest cloves also were flooded. The results of this "act of God" have been felt, not only in the cloves themselves, but in clove leaf and bud oil and a dozen aromatic chemicals derived from the clove oils.

Pepper — A firm market is in prospect for black pepper for this reason: dealers anticipate limited arrivals in the near future and feel that normal seasonal demand will prevail. Pepper from both Singapore and India, which, for several weeks has been quoted at relatively high prices, is still being offered at these high prices. In many cases, the source price has been considerably higher than the spot price. Reports last week, however, indicate that the greater part of these stocks have now been sold—obviously to other dealers than those in New York.

Pimento—Both the Mexican and the Guatemalan have been in heavy demand recently. Supplies, as a result, are short and a price rise is anticipated by dealers here.

MACHINECRAIT

Stokes 3 DDS2, 2 DS3.
Baker Perkins, 150 and 100 gal. S.S. 2 arm.
40 HP & 50 HP jacketed, vacuum, hydr. tilt.
Blaw-Knox 2 gal. S.S. Autoclave 5,000 lb.
Vulcanizer 60" x 9' 125 lbs.
Sweetland #2 all stainless.
Stainless steel Ball Mill.
Aluminum Condenser 350 square feet.
4-24" Filter Press S.S. Fittings Wood Fr.
1-24" Filter Press open delivery.
2 Proctor & Schwartz finned Drum Driers.
Continuous Stripping Column 2 x 13.
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MACHINERY — ANYONE?
1—Sperry 36" cld. delvy. plt. & frm. ALUMINUM Filter Press, 30 chambers
1—Simpson Size O Intensive Mixer, m.d.
2—Gruendler 16-40 Aristocrat Hammer Mills, cpld. to 75 h.p. motor.
1—Robinson STAINLESS Gyro Sifter, single deck, 36x60".
1—Syntron Vibra Flo Feeder with controls.
1—Lee 150 gal. S.S. Kettle, 40# jkt.
1—Tolhurst 30" S.S. Extractor, ex. proof.
72—#12 Sweetland vertical sight glass fittings.
Mixers, Hammer Mills, Tablet Mchs., etc.
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Gordon Research Group Set for 12-Week Meeting

The Gordon Research Conferences, set this year as in the past at three New Hampshire colleges—Colby Junior College, New Hampton School, and Kimball Union Academy—will be held weekly from June 15 through September 4.

A total of thirty-six conferences are scheduled for the twelve-week program, including for the first time forums on chemistry and physics of liquids, photonuclear reactions, and molten salts.

According to the group, attendance is limited to approximately 100 at each conference. Because the primary objective of the conferences is to extend the frontiers of scientific knowledge, acceptance of applications is based on the individual's ability to contribute to the discussions.

In addition, it was added, each conference chairman is responsible for effecting an appropriate balance in attendance among scientists from industry, government and academic institutions.

Numerous Subjects

Conference subjects scheduled for this year are:

Separation and purification; petroleum; catalysis; polymers; textiles; corrosion; organic coatings; medicinal chemistry; elastomers; food and nutrition; instrumentation; cancer; chemistry and physics of liquids; chemistry of coal; proteins and nucleic acids; magnetic resonance; organic reactions and processes; microbiological deterioration; radiation chemistry; steroids and related natural products; inorganic chemistry; analytical chemistry; statistics in chemistry and chemical engineering; chemistry of adhesion; lipide metabolism; physical metallurgy; nuclear chemistry; solid state studies in ceramics; chemistry, physiology, and structure of bones and teeth; cell structure and metabolism; chemistry at interfaces; biochemistry and agriculture; toxicology and safety evaluations; chemistry and physics of metals; photonuclear reactions; molten salts.

Miles Labs

—Continued from page 5

new company was made last week, Mr. Roderick had this to say:

"The move is being taken at this time to insure optimum efficiency both internally and externally. The anticipated growth of this division, coupled with the complexity and variety of its products, is bringing about the need for a high degree of autonomy.

"By establishing Miles Chemical Company, we will be better able to achieve a higher concentration on the part of management for the specialized activities in this area. At the same time we are combining these varied chemical procedures under a single, experienced administrator.

"We expect that the unification of all components of a chemical nature into a single, larger entity will provide over-all strengthening in marketing, product development, research, sales and customer service."

Prior to joining Miles Laboratories, Mr. Roderick was vice-president of International Minerals & Chemicals Corp. in Chicago and was director of research and later director of sales for Wyandotte Chemical Corporation, Wyandotte, Mich.

Goals: Sales, Research

Mr. Roderick said immediate goals under the new arrangement will be the establishment of an integrated sales force, research and product development programs. Long-range, he noted expansion into international production, additional acquisitions and moves into new markets are high on the priority list.

Sumner was acquired by Miles Laboratories in 1946 and Takamine in 1956. Miles pioneered the development of a unique submerged fermentation process for producing critic acid and erected a plant in Elkhart which began operations in 1952. Currently a $3.6 million expansion program is under way which, when completed in the fall of 1959, will enable Miles to more than double its present output of critic acid.

The Sumner and Takamine names will continue to be used in connection with their products for an indefinite "transitional" period, according to Mr. Roderick.

Montecatini Unveils

—Continued from page 4

the world—only seven years after the search for oil there started.

• The report from Harold J. Gibson of the Detroit, Mich., laboratories of the Ethyl Corporation, that his company has developed a new experimental antiknock compound—"AK-33X"—based on manganese which promises to broaden the usefulness of tetraethyl lead.

• The announcement by Dr. Karl Ziegler, director of the Max Planck Institute for Coal Research in Muelheim, Germany, that he has developed a new lower-cost process for the production of tetraethyl lead. Dr. Ziegler said it required half the electric power of the conventional TEL process now in use.

• The news from Esso Research & Engineering Company, Linden, N.J., that it is developing a new refining process aimed at reversing the trend of higher manufacturing costs for higher octane (antiknock) gasoline.

•The flat assertions by Dr. Robert E. Wilson, member of the Atomic Energy Commission's general advisory committee, that "there will be few, if any, unsubsidized atomic power plants completed in the United States for purely commercial purposes before 1968" and that it will not be before 1968-80 that some of the larger commercial power plants in this country will be built without subsidy to use atomic fuels.

• The disclosure by five Soviet scientists that nuclear physics methods are being used in oil and gas detection, prospection and production in the USSR. Radioactive logging is being employed widely in exploring for oil and gas in the Soviet Union, and radioactive isotopes also are used to determine the technical condition of wells.

MCA Backing Legislation On Plant Growth Chemicals

Manufacturing Chemists Association added its support last week to legislation placing the regulation of agricultural chemicals known as nematocides, defoliants, desiccants, and plant regulators under the federal insecticide, fungicide, and rodenticide act.

The association made known its views in a letter to the senate agricultural committee commenting on S 1900, which is similar to HR 6436 reported recently by the house agricultural committee. The house bill is to be called up for passage on the house floor shortly.

MCA pointed out that the legislation, in addition to avoiding overlapping and confusion between the federal insecticide law and the food additives law, would establish a standard for states which are expecting to amend their own pesticide laws to keep them current with developments in the field of agricultural chemicals.

Trade Name Chemicals

—Continued from page 42

the emulsifier's ethylene oxide content increases.

General Mills has on the market a group of fatty trimethylene diamines for use by asphalt emulsion manufacturers called **"Diams." "Diam 26"** is a tallow diamine with a melting range of 43° to 47°C. General Mills claims that the addition of 0.5 to 0.75 percent of **"Diam 26"** to both cutback and hotmix asphalt paving compositions will reduce the stripping action of the composition from most types of aggregate.

Other General Mills products to be used in asphalt emulsions are the **"Alamines,"** which are primary and secondary fatty amines. According to General Mills, the amine promotes the bonding of asphalt to wet aggregate. Also the acids usually present in asphalt form salt with the free amine groups. These salts will tend to dehydrate on prolonged heating at elevated temperature and are thus inactivated. General Mills also states that the **"Alamines"** are usually formulated with materials such as crude tall oil and fuel oil prior to addition to the asphalt.

Enzymes

Among the many applications of enzymes as textile desizing agents, they are used for the digestion of starch sizes on both natural and synthetic fibers. Diastatic enzymes are often used to fulfill the needs of starch digestion. The main consideration regarding enzyme activity on the starch size is solublizing the starch rapidly and efficiently.

Starch consists of two components, amylose and amylopectin. Enzymes have similar effects on both in that the molecular weight of the starch is reduced and solubility increased. Enzyme attack on the amylose part causes breaks in the chain and improves solubility of the component. The amylose portion has nothing to do with the viscosity of a starch. Rather, the amylopectin provides viscosity and body and must be degraded by specific enzyme action.

Wallerstein Company, Inc., has on the market **"Serizyme,"** a liquid, standardized proteolytic enzyme preparation which can solubilize various types of protein substances. The product is said to find wide application in the textile industry. Among them: **"Serizyme"** desizes rayon and acetate fabrics containing protein, and it may be used in soaking and stripping real silk.

For desizing, Wallerstein states that **"Serizyme"** is applied in neutral solution of pH 6.5 to 7.5 and at temperatures ranging between 110°F. and 130°F. Like other enzyme preparations, its activity for a given concentration is influenced by the pH and temperature of the bath during the digestion period. **"Serizyme"** is quickly inactivated at temperatures above 130°F., so temperature should be kept down to 125°F.

According to Wallerstein, treatment of a fabric with **"Serizyme"** prior to boil-off or scour will remove the size completely, will eliminate streaking, blotching and dull dyeing and result in maximum softness, uniformity and brilliancy of the dyeing.

"Rhozymes" are diastatic enzymes offered by Rohm & Haas Company for textile desizing. More specifically, they are used for the digestion of starch sizes on cellulosic and synthetic fibers and blends of all fibers. Of the bacterial type, the **"Rhozyme"** agents are desirable for use in solubilizing starch which requires good heat stability. Characteristics common to all of the **"Rhozymes"** are high heat stability, efficiency under all conditions, and ease of handling.

The **"Rhozyme"** line includes: **"Rhozyme LA," "Rhozyme MH," "Rhozyme GC," "Rhozyme DX."** Physical properties of the first three include a liquid physical state, brown color, water dilutability in all proportions, and stability to prolonged storage in cool areas. **"Rhozyme DX"** is a buff colored powder, is water soluble at use concentration, and a pH of 7.0. The pH in a one percent solution of **"Rhozyme LA"** and **"GC"** ranges from 5.8 to 6.5 and for **"Rhozyme MH,"** 6.1 to 6.2.

According to Rohm & Haas **"Rhozyme LA," "MH,"** and **"GC"** are readily soluble. It is recommended that these products should be used in combination with salt to achieve the best heat stability. **"Rhozyme DX"** is a powder and does not require salt, but instead may be sprinkled into the bath.

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